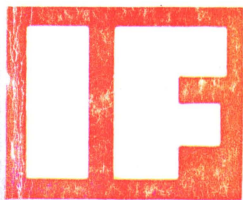


WORLDS OF

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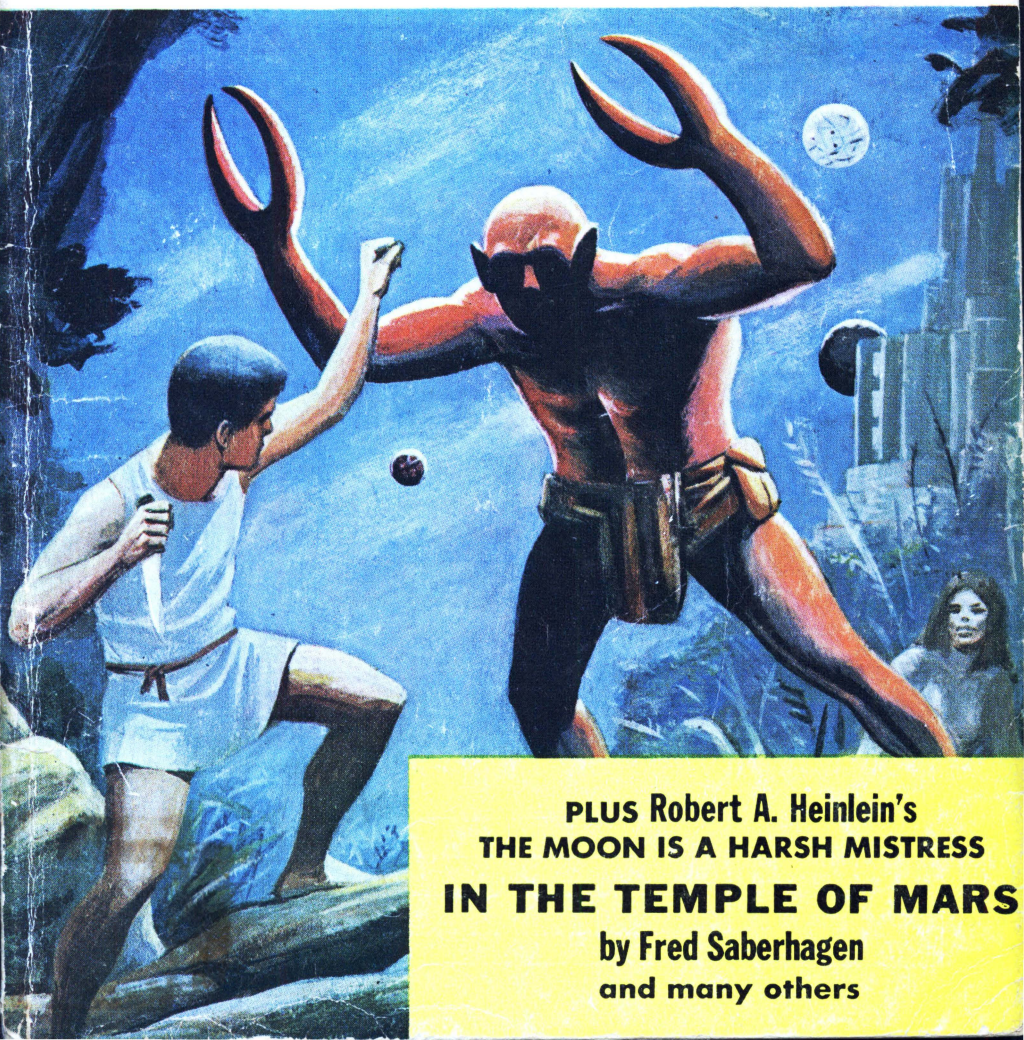


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**Vol. 16, No. 4
APRIL, 1966
ISSUE 101**



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KICK YOURSELF TO MARS

As some of the papers on the Orion Project and related matters become declassified and available, we begin to get a look at some of the ideas that went into it.

Apparently that's all we're ever going to get — a look. The project was terminated over a year ago, and if there is any prospect of reviving interest in nuclear-powered space-ships in this country, it is certainly well below the visible threshold.

One of the interesting ideas put forth was a nuclear device that would propel ships across space by kicking them from behind. The essential energy is an explosion — as in a conventional rocket, or for that matter in the cylinders of your car.

But the explosion would be nuclear — fission to start, fusion later on — and instead of occurring inside a combustion chamber it would occur outside the ship entirely. The explosion would take place in space, behind the ship. Its force, most of which would be wasted, would nevertheless press against a spring-mounted, ablation-surfaced butt-plate at the stern of the ship; and that thrust would propel the vessel. Literally it would be forced through space by a series of kicks from outside.

Wasteful? Most of the energy would dissipate itself into space, true — but with nuclear reactions there is a great deal of energy for

a small amount of fuel mass; and that is the critical factor. Shocks? No doubt there would be, no matter how elegantly and massively sprung the shock absorbers. But the designers assure us they would be tolerable. And the advantages would be great. To name just one, it would be possible to leave such a vessel, on the surface of another planet if desired, without automatically committing suicide. Few other systems for utilizing nuclear reactions for thrust can make this claim . . .

But it isn't really important whether this particular system is better than another, when it seems clear that national policy is solidly set against *any* use of nuclear power for spacecraft. The choice of one system over another is basically a matter of engineering. The decision to throw all nuclear systems down the drain is a matter of politics.

Since the proponents of nuclear-propelled spacecraft claim that in five years such vessels could do anything we now do with chemical rockets in space exploration — and go on to reach any planet of the solar system, in a matter of a few months for a round trip, bearing up to a dozen men and 500 tons of supplies in the process — shouldn't we go on with the investigations, at least?

It isn't as though there were incalculable amounts of money involved. Orion, at its present stage, could be nurtured on as little as one or two million dollars a year — less than a thousandth of the cost of our present space program, for a system which may well make chemical space rockets as obsolete as the square-rigger.

So why not go on with it?

There turn out to be several "why not's". Why Not #1 is that there just isn't a ready-made home for Project Orion in our space program. Each agency has had its duties spelled out for it. None has been charged with the responsibility for applying nuclear energy to the overall task.

Why Not #2 is a classic example of the road that good intentions pave. In the Atomic Test Ban Treaty there is a provision against atomic explosions in outer space. The obvious intention of the signatories was to prevent nuclear war in space, and maybe more immediately to prevent disasters like Project Starfish. Which was our military spacemen's go at firing off a bomb up there to see what would happen. What happened was that the Van Allen belt was bent out of shape for the first time in a billion years, three satellites were destroyed and the lights in Public Information Offices burned all night as the mimeographs cranked out statements that it wasn't really *important* that this unexpected thing had happened, because after all nobody got killed.)

But the treaty now prohibits using nuclear explosions even to drive spaceships, though one would assume all parties would be willing to modify it in that respect if convinced it were worth while.

Why Not #3, the deadliest of all, is pure inertia. To chemical rockets, preferably liquid-fuel ones, we are committed, and with them we will stay.

We may yet kick ourselves from here to Mars — if not with Project Orion, then out of embarrassment because we dropped it!

— THE EDITOR

Earthblood

by KEITH LAUMER and ROSEL GEORGE BROWN

Illustrated by NODEL

*His ancestors had conquered the
stars but now they were slaves
— these creatures called men!*

PROLOGUE

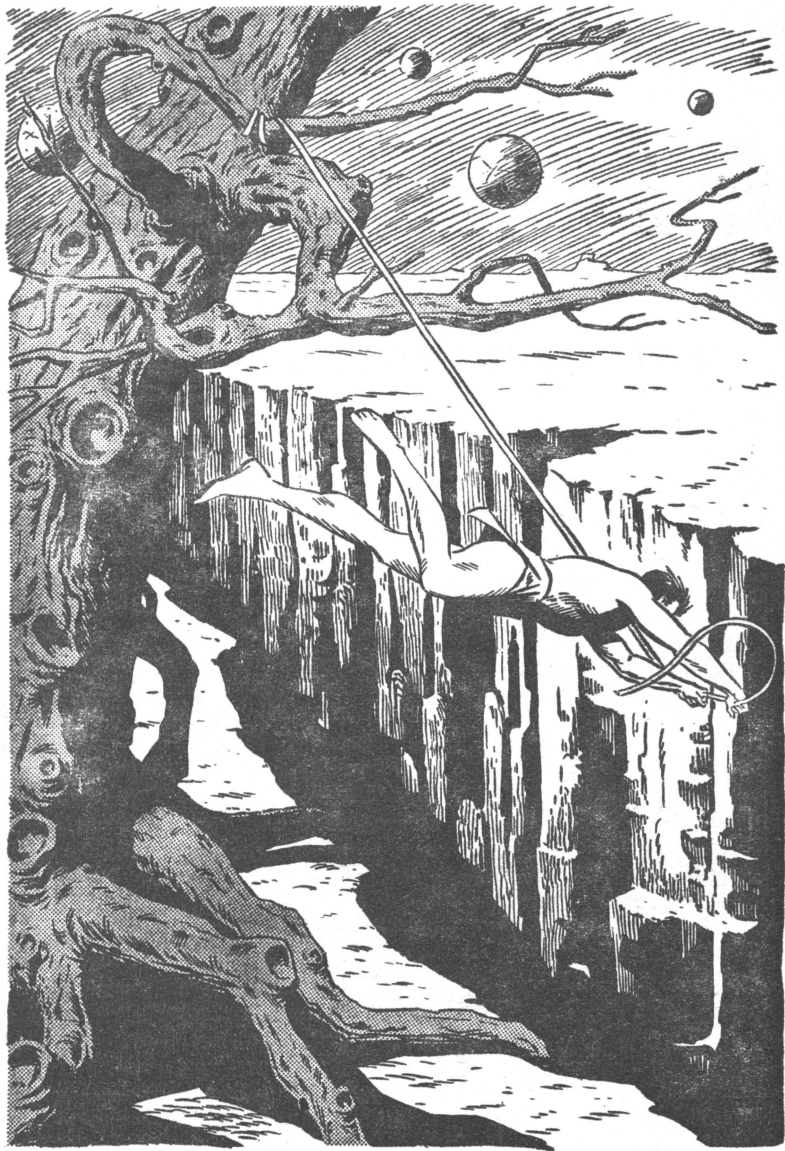
The sign scabbed to the dog-yellow wall read:

**FOR SALE
VIABLE HUMAN EMBRYOS
GENUINE TERRESTRIAL STRAIN**

"This is the place, Bella," Raff Cornay said. "By God, we're a long way from home."

Bella smiled up at him and bit her dyed lips. Having them dyed hadn't really made her look twenty years younger—or even a year younger. She moved closer to his side, put lean, grayish fingers on his thick, brown arm, looking up the dark ravine of the stairway.

"Raff, it's so . . ." she started and then left it, because when you've been married twenty years all those words aren't necessary.



Raff hitched at the harness that crossed his heavy, rounded shoulders, brushed with a finger the comforting bulge of the short-barrelled power pistol.

"We'll be all right, Bella." He patted her thin hand, moved ahead of her to the high, narrow steps, worn into hollows pocketing oily puddles. The heat and sounds of the plaza faded as they climbed through layered odors of decay and alien cookery, passed a landing railed with twisted iron, reached a towering, narrow doorway hung with a dirt-glazed beaded arras that clashed softly as Raff held it aside.

There was a leathery rustle, a heavy thump, the clack of clawed feet. An enormously tall, stooped figure in ornately decorated straps and bangles minced forward from yellowish gloom, ruffling moulting plumage. It settled itself on a tall stool, clattering stiff, flightless feathers, blinking translucent eyelids from Raff to Bella.

"What do you want?" the creature rasped. "There is no charity here."

"The lady'd like to sit down too, maybe," Raff said sharply.

"Then sit."

Raff looked around. There was no other chair. He looked at the proprietor, eyeing the red, leathery neck, the tarnished beak.

"I never knew one like you before," he said. "What are you, you don't know how to treat a human lady?"

"Human?" The alien clacked its beak contemptuously, staring at Bella's gray Yill skin.

"Don't, Raff." Bella put her hand

on his arm. "We don't care nothing about him. All we want's the baby." Through the ill-fitting youth suit he had bought for the trip, she could feel him forcing himself not to care. Maybe he was too old for the legal adoption agency, but he was as good as any man a hundred years younger.

"We've got money," Raff said tightly. "We're here on business."

The big eyes blinked at him. "How much money?"

"Well — almost five hundred credits."

The tall creature on the stool closed its eyes, opened them again. "I can offer you something in a sturdy mute, guaranteed I.Q. of 40 . . ."

"No," Raff and Bella said together. "No defective stock," Raff went on. "Your sign down on the square said Genuine Terry Strain."

"Too much intellect in a slave is undesirable. Now, this line of stock . . ."

"You think we'd make a slave of a human child?" Raff snapped. "Can't you see we're Terries — Terry stock, anyway," he added, as the round eyes flicked over him, then Bella. She stirred and wrapped her cloak closer.

The dealer clacked its beak contemptuously, "Five hundred credits! And for this, I should produce perhaps a Conquistador, complete with Sc. D. certificate?"

"Just an ordinary boy," Raff said. "Just so he's normal. Earth normal. We don't mind if he's maybe color-blind."

The dealer cocked its head, eyed Raff. "What kind of citizenship do you have?"

"What? Why, we're Freeholders, from Granfont."

"You have papers?"

"Sure. Otherwise we'd never . . ."

The dealer half turned, raised its voice in a sharp cry. A small slave in trailing rags came in from a side room.

"Bring benches for my valued customers—and brandy. The Fleon, '49." It turned back to Raff, its hooded eyes sharp and interested now. "A happy blending of rain, sun, sulphur and fungi."

"We don't need the build-up," Raff said. "We didn't come here to socialize." He stopped. It wasn't a thing you could put words to. *We came to buy a human child . . . to buy a son.*

"Ah, but I like people with resources. I confide in them." The dealer was beaming owlishly now. "You wish an heir. I understand. You have come at a fortunate time. I can offer a most exceptional embryo—a son fit for an emperor!"

"We're not emperors," Raff said. "Just plain folks. We want a plain Terry boy."

"So." The dealer ruffled limp shoulder plumes indifferently, his expression abruptly cold again. "If you want to rear inferior stock, I can sell you something cheap."

"Good. How much?" Raff rose, resting his hand on his credit coder.

"Wait!" Bella cried. "I want to know what he means. What's the . . . the other kind you was talking about?" She pulled Raff back into

his chair as the slave returned with a tray bearing a clay pot and bell-shaped glasses.

The dealer placed spidery, plucked-chicken fingers together, waiting while the slave poured and withdrew. He cocked an eye at Bella.

"As it happens, I am in a position to offer top price for free-hold citizenships."

"Are you crazy?" Raff started. "How'd we ever get back?"

Bella picked up a glass and said, "Wait, Raff." She made a great thing of sipping the brandy, making it a compliment.

"Sell our citizenships!" Raff snorted. "It takes us for ignorant rubes. Bella."

The creature hunched on its stool, fragile feathers raised in a halo around its head, eyes on Bella now.

"I happen, at this moment, to have in my tanks," it said with impressive gravity, "a prime-quality fetus intended for the personal service of—a most high official. A magnificent blastophere, large, vigorous and of a superior intellectual potentiality."

"What's wrong with it, this high official didn't take delivery?" Raff asked bluntly.

The round eyes blinked. "Alas, the Shah is . . . er . . . dead—together with his heirs and assigns. One of these annoying uprisings of the rabble. By great good luck, an agent of mine—But no matter. I lost two valuable servants in the acquisition of this prize, which now,

frankly, must be transferred to a suitable artificial placenta, or be lost. I confide this in you, you see."

"This is just sales talk, Bella," Raff said. "To build up the price."

"A rustic's shrewdness is the merchant's joy," the dealer quoted sharply. It raised its head and shrilled for the slave again, chirped instructions. Raff and Bella waited. The slave returned, toiling under a small, glittering, stone-encrusted box. At a sign from the dealer, it handed the casket to Raff. He took it; his hands sagged under the unexpected weight.

"This golden incubator, set with diamonds, awaited the favored tot. Now heavy-footed bucolics haggle for his destiny. The price is three thousand credits—or two freehold citizenships."

"That's twice the going black-market price," Raff said weakly, overwhelmed by the box and what was in it.

"You're not bargaining for black-market goods now. I'm a legitimate trader, licensed by the Sodomate."

"I'll give you one citizenship," Raff said. "Mine. I can earn another with a few years work."

The dealer snapped horny lips together. "I'd decant this jewel among lads into the hive sewers before I'd cut my price a demichit! The descendant of kings deserves no less."

"Raff . . ." Bella said, appeal in her voice.

"How do we know he's telling the truth, Bella?"

"I have a license to protect, out-

lander," the tall creature said. "You think I'd risk my reputation for your paltry custom? The Shah paid fifty thousand Galactic credits in rhodium ingots!"

"But if you don't sell it quick—"

"I've told you my price. Take it or leave it—and then get out."

"Well . . ." Raff hesitated.

"We'll take it," Bella said.

They moved through the noise of the plaza, Raff leading the way among hawkers' stalls, Bella clutching a two-inch glass cylinder to her lean chest. Yellow dust swirled, stirred by a fitful desert wind. The second sun was low in a bronze-black sky.

"We shouldn't have spent all that credit," Raff said. "How're we going to get back, Bella?"

"We'll find a way," Bella said. "But first, we got to find a Man doctor."

Raff halted. "Bella! You ain't coming down sick?"

"We got to have the baby implanted right away, Raff."

"Bella, you know we can't afford that now. We'll wait 'till we're back on Granfont, like we planned."

"We thought we'd have time, Raff. But we don't. He'd never have sold so cheap if time hadn't been short—awful short."

"But we were going to use Len's stock brooder. Where'd we ever find a mammal brooder here? And we'd have to stay nine months—"

"We won't have to stay, Raff. I'll have the baby implanted—in me."

Raff stared at her. "Bella—you

sure? I mean, could you . . . could it . . . ?”

She nodded. “I asked Doctor about it once, a long time ago. He said—first he took a lot of tests—and then he said I could.”

“But Bella, you’re . . . you’re not . . .”

“He said I could—even if I’m not human.” Her vertical-slitted eyes were bright in her still-piquant face. “I’ll be the mother of our son, Raff. He’ll be our human boy, born to me.”

Beside Bella, Raff raised his head suddenly. He moved closer to Bella, put a protective arm around her.

“What is it, Raff?”

“Bella—somebody’s following us.”

“Following . . . why?”

“I don’t know. Give me the boy. And stay close.”

They turned into a canyon with harsh lights, pushing through the jostling crowd. Alien hands plucked at their sleeves, alien eyes stared, alien voices implored, cursed, begged, threatened. The dust rose, hot and corrosive.

“Down here,” Raff gasped. In the shelter of a narrow way they clung together, coughing.

“We shouldn’t have left the main plaza,” Bella said. “Tourists don’t come here.”

“Come on.” Raff led the way, thirty feet back, when the twisted path ended between high walls in a cul-de-sac. They turned.

Two figures, one squat, one tall, bath wrapped in heavy, dun-colored togas, waited at the alley-mouth.

“Stay behind me.” Raff tucked

the cylinder in a harness pouch, put his hand inside his tunic to rest on the pistol butt, started forward; the short creature came to meet him, waddling on thick, bowed legs. Ten feet apart, they halted. Raff looked down into dead eyes like black opals in a face of bleached and pocked wood.

“We are stronger than you,” the alien grated. “Give us the royal slave and go in peace.”

Raff brought the gun into view. There was blue stain across his throat where the cheap dye of the youth suit had dissolved in sweat.

“Get out of our way.” His dry mouth made his voice rasp.

There was a moment of silence. Then:

“We will pay,” the alien said. “How much?”

“I’ll sell you nothing. Just clear out of my way.” Raff licked sweat from his upper lip.

The tall alien had moved up behind his dwarf companion. Beyond them a heavy, lizard-bodied Minid with a scaled hide painted in garish colors moved into view, and behind him were others.

Raff took a step forward. The gun was almost touching the dusty folds of the other’s toga. “Out of my way or I’ll shoot sure as Hell!”

A stumpy arm whipped out; Raff fired—a momentary flare of blue; then the gun was flying as the weight of the alien slammed against him, and he reeled back, grappling for a hold on horny hide. He caught a sinewy arm, twisted with all his strength, heard gristle creak,

snap. He hurled the alien from him, leaped past him, swung at the tall one, missed as he leaned aside. The gun lay two yards away.

He dived for it—and a vast weight slammed against him, driving out his breath in an explosive grunt. He was aware of the roughness of the cobbles against his face, a fiery pain that rolled in waves from his shoulder. Far away, Bella's voice wailed.

Raff rolled over and came to his knees. A wide foot in a ragged sandal smashed at his face. He caught at it, held on, dragged a kicking, fighting body down, hearing himself cry out at the agony in his shoulder; and then he found a grip on yielding flesh and clung, crushing, feeling cartilage crackle under his thumbs. He grunted, hunching his shoulders as talons raked across his face once, twice, then scrabbled and fell away. Then hard hands hauled at him, threw him on his back. He struck out blindly, rolling over to protect the cylinder with his body.

He tried to crawl toward the gun, but a boulder, falling from an immense height, had crushed his body and his lungs were charred pits in his chest. His arms and legs moved, though he had forgotten now why he must crawl

A last, brilliant light flared and died into bottomless darkness, and Raff felt himself fading, fading, winking out

He lay on his back, hearing their voices.

"This one fights like a scalded dire-beast!"

"... cartilage like rods of granite!"

"Break them . . ."

The blows were remote, like distant thunder. The beating went on for a long time. Raff didn't notice when it stopped; he floated in a silence like a sea of molten lead. But voices penetrated the silence. There was the deep rumble of one who demanded, and a thin cry . . .

Bella.

Raff moved an arm, groped over his face, wiped blood from his eyes, feeling broken flesh under his fingers. He blinked, and through a red blur saw Bella, held pinned against a wall by a cloaked figure. Its arm rose and fell, rose and fell again

Raff reached, groping. His hand fell on the power pistol. He tried to sit up, coiled away from agony like a worm on a hook. He dragged the gun around, leveled it on the yellow cloak and fired. The cloak crumpled. Another caught at Bella, whirled her around as a shield.

"You will kill your woman," a thin voice said flatly. "Give us what we seek and go your way. We are stronger than you."

Raff was watching Bella. She hung in the grip of the alien, small, limp. He saw her hand move—

"Why do you struggle so, foolish one?" the alien grated.

"Leave . . . us . . . alone," Raff managed. Bella's hand was at her girdle. It fumbled, came away. Light glinted on steel. Raff saw the thin arm grope, finding the vulnerable spot between plates of scale-armor—then sudden movement—

There was a grunt from the creature who held Bella. He leaned, fell stiffly, the handle of Bella's rat-tail poinard against his side. Behind her, a dark shape moved. Raff fired, a near miss. But the alien halted, called out in a strange tongue. Raff blinked gummed eyes, aiming.

"Wait, Raff," Bella called. She spoke rapidly, incomprehensibly. The alien answered. Raff held the gun aimed at the voice.

Bella was beside him. "Raff, this one's a Yill—like me. He gave me his parole."

"Parole, hell!" Raff croaked.

"Raff, if we spare his life, he'll be our slave. It's true, Raff. It's the Yill law. And we need him."

The gun fell from Raff's hand. He tried to reach for it, to curse the weakness, but only a thin moan came.

There was a babble of alien talk, Bella's voice a thin thread against the rumble of the other. Raff tried again.

"... Bella ..."

"Yes, Raff. It'll be all right now. T'hoy hoy will take us to a place ..."

"Use the gun," Raff gasped out. "Make sure of the rest of 'em—all of 'em."

"Raff—if we just go now—"

"No good, Bella. No law in this place. Taking no chances. There'll be no wounded devils tracking us ..."

Afterwards, there was a confused memory of strong arms that carried him, and pain like a blanket of fire, and the bite of the night wind, sud-

denly cold; and later, voices, the clink of keys, and at last a nest of smouldering furs, and Bella's hands, and her warm breath against his face.

"Raff! Poor Raff."

He tried to speak, gasped, tried again. "Our boy," he said. It was important to explain it to Bella, so she'd see how it was. "Our boy. Bought with money and bought with blood. He's our boy now, Bella."

Leaning heavily on his cane, Raff looked down at his wife and his new born son while the slave T'hoy hoy washed out rags in the tin tub by the door.

"This ain't the way I meant it to be," Raff said. "Here in this fallen down shack in the ghetto. Gee, Bella—"

"When you get more able you can paint it pretty and white. And it's on the other side of Tambool from the bazaar. They won't look for him here. Roan."

"My son," Raff said, touching one tiny, curled fist. "In fifty years, maybe, he'll be a full grown human man."

I

Roan was bored watching his mother wash dishes.

"No," she said. "I can't take you outside now. After I do the dishes I got to grind the grits and then shell some snails and clean your daddy's brushes so's he can do some spring painting when he gets back from that job in town. And then . . . stop that!" Bella cried.

Roan tried to stick the paper back on the wall but it wouldn't stay.

"Daddy fix," he said. His nose was running and he wiped it on the end of the curtain.

"Not on the curtain," Bella said. "I just washed them and I didn't make no more soap yet."

Roan reached for the salt cup. Salt was a nice thing to taste, a little at a time. Only it all came over on him.

"The salt!" Bella screeched. "Now that's the end! Raff worked all day one day just to get that salt for you and there it's all over the floor and how I'm going to wash salt?"

Roan began to wail again. Everything he did was bad.

"All right," Bella said. "All right. I guess maybe you could go out in the back. You stay near the house. And don't get into no trouble, and leave them chunk flowers alone. That juice don't wash out."

Roan ran out into the sunshine with a whoop of joy. He could taste the sun all over him except where his clothes were.

O, what lovely chunk flowers! Purpler than purple-fruit, redder than blood, greener than grass.

Musn't pick the chunk flowers.

He wandered to the other side of the yard where it trailed off into a dust lot beyond the careful picket fence that Daddy was going to paint again soon.

Roan liked to pick the flakes of old paint off it, but today something more interesting was there.

On the other side of the fence were a bunch of wiry, leathery little gracyl children, and oh, what fun they were having!

"Hello!" Roan called. "Hey! Hi! Come play!"

Some of them looked up.

"You're not a gracyl three," one of them said.

"Here is where the three-year gracyls dig, not there."

"I can help," Roan said. "Help dig."

He began to clamber over the fence. It was hard work and he tore a long strip off his shirt on the top of a picket.

Then, once over, he was suddenly shy and stood and watched the gracyl threes burrowing into the ground, their sharp claws working quickly.

"Me, too!" he cried then, and started in on a gracyl's burrow. The gracyl kicked him disinterestedly and kept on burrowing, and Roan burst into tears and went to help another, and got kicked again.

"Dig your own burrow," one of them finally said, not unkindly. Roan could see he was a little different from the others. One embryonic wing had failed to develop.

"You don't got a wing bone," Roan said. "Where you wing bone?"

The gracyl stretched out his one good wing into an infant fan. "They grow later," he said. "You don't have any wings."

Roan tried to feel beneath his arms but he couldn't find anything.

"I'm going to grow my wings later," he said excitedly. "Then I'll fly. I'm Roan."

"I'm Clanth," his new friend said, and then noticed the others had already burrowed ahead of him. "Shut up and dig."

Roan began to dig and found out almost immediately it wasn't as easy as it looked. The dirt at the top was loose, and came right out, but underneath the ground got damp and harder.

"Mama cutted my fingernails," Roan said bitterly. He *knew* she shouldn't have cut his fingernails and now look — he couldn't dig like everybody else.

Roan went and found a sharp stick and began to do a little better. He hit hard with it and suddenly a hole opened up all by itself. A nice, big hole and Roan crawled into it and a gracyl came up and punched him and said, "Dig your own burrow, you freak."

Roan took his stick and began digging down some more.

"You're doing it wrong," the gracyl said, and went on lengthening his burrow.

But as Roan gouged at the earth, it fell in again, and he was in another burrow and it was quite dark and a little cold, but Roan crawled further along into the burrow and then he ran into something furry that he couldn't see in the dark.

"That's funny," Roan said aloud and laughed, because something was tickling the inside of his mind.

"Here it is lovely and cool and dark and no winds blow. Here live we Seez and who are you?"

"I'm Roan," Roan said aloud.

The See put out a soft claw and felt Roan. *"You do not feel like you look in your mind,"* it said. *"There are no wings and no digging claws. Tell me again what you are."*

"I'm Roan," Roan said, and laughed again. And then there was a silence in Roan's mind while the creature felt around in it, and he waited, feeling strange.

"There's something amiss with you," the See said. Roan felt him backing off. *"You can't tell me who you are. And some terrible power lurks there in your mind. And such enormous puzzles, and things that are strange . . ."*

Roan could feel a shudder from the creature's mind and then it was gone and he was alone. Alone in the dark cold, with all those strange things the See said were in his mind. And the ground smelled dead and damp and wormy and there might be Charons crawling through the burrows to eat dead things and suppose they thought he was dead?

Roan started to back out and found he was scared and all he wanted was Daddy or Mama and his own bed. He sat down and opened his mouth and howled.

The tears poured out of his eyes and he felt dirt in his mouth and he screamed with all his body and he was wet, now, too, and that made everything worse.

Then he felt Raff's strong hands on him and even though he knew it was Raff he had to go on screaming to show how scared he had been.

"Boy," Raff said when he got him out and the screams quieted to sobs. "Boy, I been looking all over for you." Daddy sounded funny. Daddy was scared, too.

"And I'm going to do something I never done before. I'm going to give you a good lickin'."

And he turned Roan over his knee, but Roan didn't mind the licking. By the time it was over he'd stopped crying altogether and he got up and looked solemnly at his father and Bella, who was hysterical and hollering for Raff to bring Roan in for a bath.

Roan wiped his nose on the back of his hand and said, "What am I?"

"You," Raff said, "are a human boy. And some day you'll be a human Man. Pure Terran you are, boy."

"But I got funny ears," Roan said, feeling one ear, because suddenly it seemed as though it was mostly his ears, his funny, rounded ears on the side of his head, that might be the cause of all his trouble and misery.

"What's Terran?" Roan asked T'hoy hoy, as the Yill slave carefully washed him in a big wooden tub of hot water, while Bella hovered, checking.

"Terran?" T'hoy hoy echoed. "Well, a Terran is from Terra."

"Uncle T'hoy hoy know a song about Terra?" Roan asked hopefully. Roan knew from his voice that he did. T'hoy hoy had a special way of pronouncing things he knew stories about. Sort of sing-song, like

he said the stories, speaking the ancient, melodic language of the Yill.

"Yes. And if you stand still while I wash you and then eat all your dinner and go right to bed, I'll be telling you the story."

"Oh, yes!" Roan said. "Yes and yes and yes and yes!" And he made a big splash in the water, but then he really was still and T'hoy hoy began his story.

"Once upon a time, longer ago than the oldest creature in the oldest world can remember now, there was a world called Terra."

"Is it still there?"

"We'll get to that later. A long time ago, and so far away you can't even see its sun in the sky from Tambool, there lived people on the world named Terra, and these people all looked just like you."

"Like me!" Roan's eyes grew wide, and he stood even stiller than he needed to. "With funny ears?"

"Your ears aren't funny," T'hoy hoy said. "Not to a Terry. Now, one day these Terrians built the first spaceships that ever were. A whole new kind of thing that had never been built before. Only Terrans could do that. Then the Terrans went to other worlds in their spaceships and after thousands of years, creatures all over the universe learned that those twinkles in the sky were stars with worlds around them. Because previously each world had thought it was the only one. And each thought it had the only God, whereas there are actually nine Gods.

"And Terrans learned to live on

those many worlds, but some of them changed, and on many worlds they met other beings, not human, but not too different."

Roan sat down in the warm bath water because he was getting goose bumps standing in the cold air. "You not a Terran," he said, touching T'hoy hoy's Yill ear.

"No, I'm all Yill, as far as I know. But these people began to build things of their own and do many Terran things. And since these worlds sold things to one another, and visited each other, pretty soon they also began to have wars, because each wanted to be the strongest. So the men of Terra decided to rule the universe and keep the peace."

"I got soap in my mouth," Roan said. "Tase's terrible."

T'hoy hoy carefully wiped the inside of Roan's mouth with a damp cloth.

"Then something very unhappy happened. Strange people came, from far away — on the other side of the Galaxy — or maybe even from another Galaxy — and their weapons were strange but powerful and they challenged Terra for the overlordship of the Universe. And they fought a great war that lasted for a thousand years."

"Naughty," Roan said. He could tell from the tone of Uncle T'hoy hoy's voice. "Very naughty."

"Yes, indeed," T'hoy hoy said. "These bad people were called the Niss, and such was their power that even great Terra couldn't defeat them."

"Is they kill the Terrans dead?"

"No. They put a circle of armed Niss spaceships around the planet Terra. And after that no one could get to Terra and the Terrans couldn't go anywhere. So nobody has been to Terra for these five thousand years."

"What's five thousand years?" Roan asked, jumping from the tub into the drying cloth. T'hoy hoy held for him. Roan loved to be dried in the lovely, warm cloth and he liked to wear it wrapped around him while T'hoy hoy got his clothes together.

"A long, long time. I'm not even sure how long. But the story says five thousand years, so that's what I say."

At dinner Roan crammed food into his mouth with both hands and Raff and Bella were too exhausted to make him try to use his spoon.

"This how *Terrans* eat," Roan said, to excuse himself. "Terrans do this." And he filled his mouth so full his cheeks bulged out.

"Terrans do *not* do that," Raff said. "And beginning tomorrow night you'll always eat like a Terran."

And T'hoy hoy began to tell Roan how Terrans eat and what Terrans eat, but Roan was asleep before T'hoy hoy could get past the hors d'oeuvres.

II

Roan's turn came.

The others were already across. Except the gracyl who'd fallen, and was probably dead by now.

Everybody's wings had worked, the young, pink membranes fanning out along their torsos, along under their arms — all but Clanth's. He hadn't even tried. He had looked down into the ravine and then gone home alone.

They were all laughing, on the other side of the ravine. First at themselves, because it was so much fun, and then at Roan, because he was hesitating.

It had been easy. They were proud of their wings, amused because that one gracyl had managed his wings badly and had fallen. *He* hadn't been clever. Now they watched Roan, the only one not over.

"Roan is the dumbell of the Sev-ens," they began to chant, flapping their wings at him. "Roan is stoopid-pid."

"I'm going to do it," he called. "Just watch me."

But still he hesitated. He didn't *have* any wings.

The idea was to take the rope vine, which was just long enough to swing three-fourths of the way across Endless Ravine, and swing out into the dizzy air, and then sail the rest of the way across on your own power.

Roan tested the rope vine, swinging softly on it, looking up to where it hung from high, high in the Purplefruit Tree, and then looking across Endless Ravine, across the impossible distance to where the other Seven Yearers stood.

Roan's pink face was drenched with perspiration, his tunic pasted to his child's body.

He clung to the swaying rope and thought of how it would be if he just let go and ran home. Ma would say, "What did you do today?" and he'd say, "Nothing," and the day would end, just like any other day.

"Stoopid!" they called. "Roan is a dumbell."

They'd said that before, that way, about other things, and Roan had decided it wasn't going to happen again. No — he'd show them, show them, show them — and some day there'd be something *he* could do that they couldn't do.

Roan made himself relax, muscle by muscle, as Ma had taught him to do when he was angry and couldn't go to sleep. All I think about is getting to the other side, he said to himself, and didn't mention the Ravine. He measured the distance with his eyes and gauged the swing of the rope vine with his whole body.

With luck, he'd make it.

Roan ran back with the rope vine, as far as it would go. Then he clung, feeling himself part of the arc of the swinging, willing the swing to be far enough, forcing himself to know when the top of the arc came, to let go at just the right moment.

The air was in his ears and the mouth of the ravine opened to swallow him, but his eye was on the soft pasture grass of the other side, and he let go at the apogee of the swing. Then, not knowing whether he would land or not, he relaxed himself for the landing, feeling the whistle of the air . . .

He struck, rolled freely to lessen the impact of the earth on his soft human body, hardly feeling as his foot caught briefly, then rolled free with him.

He laughed up at the group of empty faces. Somewhere inside of him something was pumping him in and out, as if he were a pair of bellows.

"Yah, I did it better than any of you," he said, and jumped up to walk off and show it hadn't been anything. "Yah," he said.

And fell down and went black.

He awakened slowly, into red and green flashes of pain, and he couldn't see anything but glaring sunlight. The other children had gone. They'd figured he was just dead.

If this was what death was, somebody ought to care.

Ma and Dad would care.

Roan started pulling himself along by his hands and his right knee. His left foot pulsed with pain that flared up his leg and into his groin. He had to peer through the brilliant sunshine as though it were a fog, to see which way home was. He would have to crawl to the swinging bridge over Endless Ravine, and across it, and then across more countryside to home.

Up the hillock and down, his dead, screaming foot dragging uselessly behind him. Roan wanted to die at home. Or not die, if Dad could fix him. But he wasn't going to lie and die where he was, as the gracyls did.

His foot bumped over a sharp stone, caught in a prickly bush. The prickly bush uprooted and clung to the dragging foot like a great insect, like the Charons that cleaned the flesh off gracyl bodies.

That gracyl lying at the bottom of Endless Ravine. He'd be thick with them now.

Roan stopped to retch. He thought of removing the prickly bush from his foot, but it was too much to do anything else except crawl toward home.

He came to the swinging bridge. Here the crawling was worse, infinitely worse, because his hands slipped on the smooth, worn boards and it was possible that he'd slip off, between the ropes along the sides, and always the bridge swayed nauseatingly.

The wood smelled dry and hot and burned his arms and hands and the prickly bush made an arid, insistent rustle, scraping along with the dead foot.

He crawled forever through the hot, bright fog, his whole leg burning like a torch. He reached home and crawled up on the stoop and called, "Ma, Dad!" and went black again, still calling through the infinite dark corridors of his unconsciousness . . .

Ma was saying, "Drink this," and he drank it.

"Raff!" she called. "He's awake."

Dad was there, his big, broken body looming in the doorway. You knew he was big, but he stood shorter than Ma.

"Stop that sniffing, Bella," he said. "I'll do it good."

Roan was gladder of Dad. Ma was so old. Like curled leaves. Like things the winds toss up.

Raff sat down heavily, arranged himself on the chair, his bent legs awkwardly set back and his twisted torso facing to one side so that his face was over Roan's, his good eye bright and blue.

"It's all right."

"I'm broken, Dad," Roan said, and realized something suddenly. "Like you." And began to cry.

"Oooh!" Ma said, almost whistling it, "Oooh."

"Get out of the room, woman," Dad said, looming over to pat Roan's shoulder. "I'll fix you, boy. Shut up, Bella. My hands are good. I don't have anything else left, but I've got that."

Raff felt softly Roan's foot. Roan screamed.

"The drink'll help some, boy," Dad said. "But this is going to hurt. There's no help for it. Let it hurt."

Roan was shaking all over and Ma was sobbing and saying, "Stop, Raff, stop, I can't stand it." And Dad was doing something to his foot and Roan shuddered and shuddered and finally thought, I'm going to die. Dad is killing me. Dad is killing me because I'm broken.

The first day that Roan was outside exercising his foot the gracyl sevens came by. Roan was carefully limping.

"He's alive!" one of them said, and they all stood still and gaped at him, and came close and then edged back a little.

"Go ahead, walk," Dad said to Roan.

Roan limped painfully.

"Put your weight on it. It doesn't matter how much it hurts. Use it. Show 'em."

"He ain't natural," a gracyl child said.

"He was dead," another added.

"His feathers ain't natural, either. Look at 'em. They're both dead people walking around alive, that's what they are."

The children edged 'back some more, flapping their skinny arms excitedly, showing the pink membranes of their developing wings.

One of them picked a bright chunckflower pod from the front garden. It missed Roan and made a garish stain on the little house Raff so carefully whitened every spring.

Dad started after the gracyl and the child laughed and spread its wings and flew off in little jumps. Raff swore at his twisted bones and useless muscles and tried to catch the children, and, forgetting himself, fell and lay there futilely trying to twist himself over like a turtle.

"Roan's old man is broken!" they chanted. "Roan's a freak, and he's broken, too!" They howled with glee and tossed the chunk flower pods as fast as they could pick them, and when the pods began to run out they used gobs of mud.

Bella came to the front door and screamed.

Roan forgot his foot. He didn't even know it hurt. He ran to the nearest gracyl and wrestled the pod from his hand and smeared the

juice in his eyes. Then he grabbed the next one and did the same thing.

They were all upon him, but they didn't fight together. They didn't have one hold him while another hit; Roan fought them one at a time. He got one gracyl in a scissors grip with his legs and another around the neck with his hands and bit a third that landed on his face.

Finally those who hadn't gotten hurt bounded off, in their half-flights, and the rest lay there to see whether they were going to die or not.

That evening before dinner Roan took off his tunic and looked at himself in the mirror, examining himself carefully all over. He felt his hair and poked at his teeth. He twisted around and examined his back minutely and then moved his arms and poked what he called his wing bones in and out, seeing the sharp edges move beneath the thin skin.

He went to dinner, but he didn't look at the food on the table; he looked at Ma and Dad. And he asked, "What am I?" He always asked, but he never understood.

"You," said Dad, "are a human being. And don't you forget it." That was what he always said.

Roan looked at the steaming plate Ma put before him and didn't want it. "Then that's why I'm stoopid. Why I can't do anything the gracyls do."

Raff and Bella exchanged glances.

"That's why you can do everything the gracyls *can't* do." Raff

said. "Or that anybody there is *can't* do."

"You cost two thousand Galactic credits," Bella said proudly.

"I cost that much!"

"You were special," Bella said. "Very special."

Roan thought of the insignificant white body he'd just examined, and how it got so easily hurt and broken and how he didn't have any wings and how he'd had to learn how to burrow and swim instead of just knowing as the gracyls did, and how he couldn't just let himself die when he was broken but had to cause everybody a lot of trouble

"You got gypped, didn't you?"

Roan said, and ran to his room to cry alone.

But when he'd finished crying he was hungry and he came out and ate and Raff talked to him about what a great thing it was to be a human—and the original Terry strain. Roan kept trying to believe all the things Raff told him.

Raff was enjoying this talk with his son, and thinking how more and more his son would be a companion to him, and how it had been worth the trouble and the expense of adopting Roan and seeing him through the difficult years of babyhood—and hadn't the boy grown fast!"

"You weren't born to be a slave. The Shah could have those a dime a dozen, or for a common soldier, because those were easy to come by, too. You were something special."

"But when will my wings grow?"

Roan asked, watching Raff's wide, brown face.

Raff shook his head. "You don't need wings, boy. You've got something better. You've got humanness."

"Oh, don't try to explain him all that, him only seven years old, even if he is big for his age." Bella said, coming in with another hot dish.

"He's old enough to understand he's a Terry. A real Terry, genuine Terrestrial strain," Raff said. "Not mutated, like me." He nodded proudly at the boy. "And not just humanoid, like your ma." He leaned toward Roan. Some day you'll know what that means. Real Terry—the breed that settled the whole universe—that built the empire, long ago."

"I thought* they were all stuck on Terra," Roan said. "That's what T'hoy hoy says."

Raff looked confused. "Yes, but . . . you were a special case."

"And if I'm a real Terry, why do we have to live in the ghetto with a bunch of old gracyls, and—"

"Here, don't go worrying your mind about all that," Raff cut in. "You're genuine, all right. I can tell. I've seen pictures. Look at you: pale skin, like skim-ice, and hair the color of wineberries, and —"

"But how did I get here, and where are the other real Terries and —"

"Raff, I told you it wasn't good for the boy to get talking about all those things."

"Some day when you're older,"

Raff said. "Now just eat your dinner, and take my word for it. You can hold your head up any place in the Galaxy and be proud. You're a Terry. Nobody can take that away from you."

T'hoy hoy had come in to put Roan to bed. "I didn't mean to upset the boy," he told Raff, "telling him about the Terran blockade and all the old Terran legends."

"Tell him the legends," Raff said. "I want him to know. Tell him your stories, T'hoy hoy."

"Then Roan, tonight I tell you the song of Silver Shane the warrior, who defeated a Niss dreadnaught single-handed by crawling up through the waste ejector and holding a fusion bomb while it exploded."

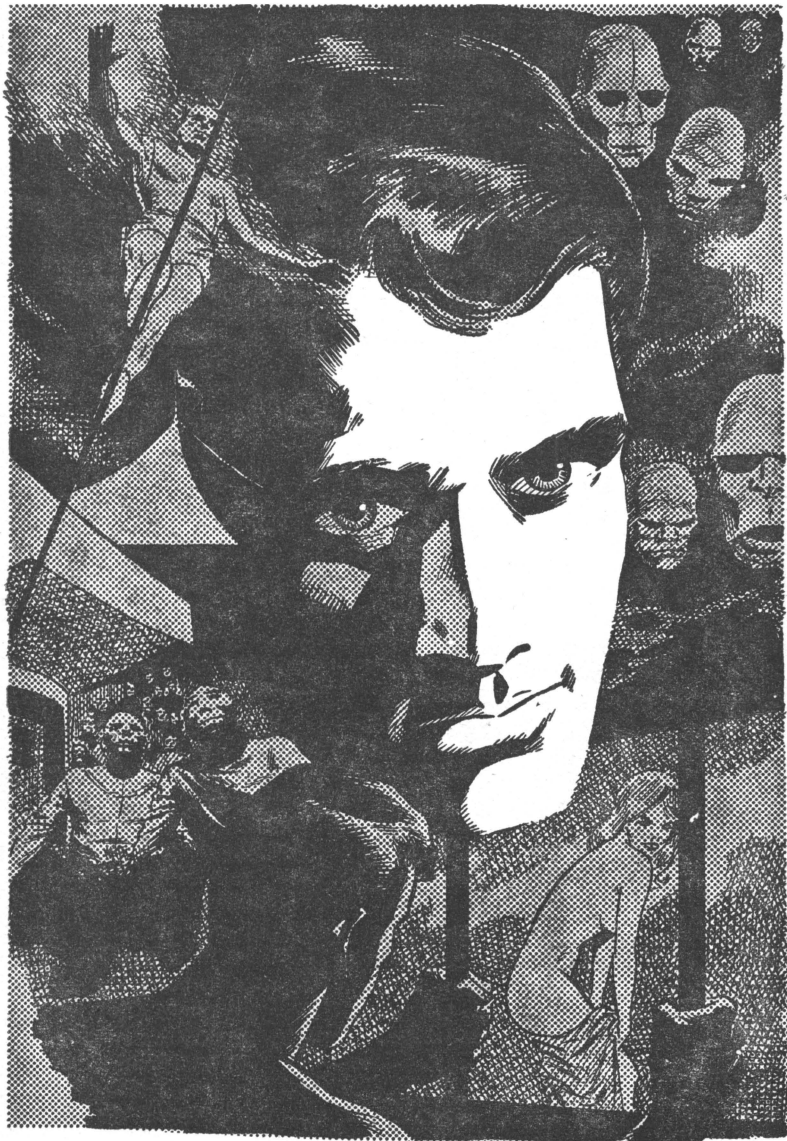
It was winter. The incontinent rains of Tambool swept across the hills and found out a hole in the ceiling of the Cornay's house and Roan heard it drip, drip and it was the last straw, to try to read with that drip, drip happening and the frowsy house smelling of age and poverty, the house they could have because nobody else wanted it.

"It's nasty outside," Bella said.

"It's nastier inside," Roan said, and flung his book across the room. "I'm through."

"You haven't even started," Raff said. "Sit back down."

Roan stood at bay before his parents. Bella set her bone-white lips and began picking irritably at the shedding skin on her thin arm. Raff tried to work up a temper over the



boy, but he couldn't. He's beautiful, Raff thought. No other word for it. Beautiful. Standing there tall for his ten years and glowing in his anger, with the dark red curls tumbling over his forehead.

"Everything," Roan shouted, "I have to do everything the hard way. I'm tired of it. They don't study, study, study. They know how to read just looking at the graffiti."

"They're only gracyls." Raff said. "Charons know how to build mud houses without learning. It's the same thing."

"I want to do whatever it is humans know how to do without learning. A two thousand credit Man ought to be able to do *something*."

Raff pounded his right fist into his left hand and wished he could flex the words the way he could flex his hands. "I've tried to make you understand. I don't know how to say it so's you'll see. Humans are superior, but that doesn't mean everything's easy for you. But you can do things no gracyl can do —"

"One thing human's don't do is read," Roan interrupted. "I hate reading."

"But you can read *good*," Bella said. "You read better than me. Better than Raff. And you can read gracyl and Universal and those Ter-ran books we kept for you."

"I know he can read good," Raff cut in. "I want him to read better. Good isn't enough."

"Human's *aren't* superior," Roan said. They're —"

"That's enough, boy," Raff said sharply. He rocked in his chair,

watching Roan sliding his foot in a puddle of rain water on the floor. Bella went to the crockery shelf and took down a bowl to put under the leak in the roof. "Suppose you can't read for Studies? You'll get sent away from home with the Junior Apprentices."

Raff frowned, watching her mop up the floor with the dish towel. "Of course he can read good enough for Studies. If only he don't trip up on a word we haven't come across in the gracyl graffiti yet. Even so, a gracyl that develops seventy per cent literacy goes for Studies. Roan's reached that by now."

Bella straightened painfully from the floor and rubbed at her shedding skin with the dish towel. She looked at Roan and bit at her lip, an old gesture that had once even been cute.

"He's been working so hard, Raff. Maybe we ought to let up on him some."

Roan went to the door.

"Here! Where are you going, son?"

Roan looked defiantly at Raff. "I'm going to do what humans can do and gracyls can't. And it isn't reading and it's not flying." And he was out of the door into the rain.

"Raff, stop him!"

"Don't worry. He's human. He knows what to do even if he doesn't know he knows."

They both sat by the strip of cloudy plastiflex window and watched the rain on the garbage dump, waiting. They didn't reach

for each other any more. Only for the boy.

The ten yearers were hilarious with the game of swoop ball in the rain when Roan came over the hill in sight of them. It was a simple game. The idea was to keep hold of the ball. They played in a grove of scattered trees, and whoever decided to take the ball would swoop down on whoever had it and take it away and then another would swoop down and take it from the second one, if possible in mid-air. And when you took the ball, you also knocked the gracyl out of the air, which was easy, and if possible into the yard-deep ditch of muddy water that ran along the edge of the little grove.

Roan leaped lightly across the muddy ditch.

The gracyls were delighted to see him. The gracyl with the ball tossed it to him. Then four of them swooped straight at him and their momentum shoved his back, straight down into the mud of the ditch.

"Okay," Roan said, climbing out in the oozy mud. "Okay, I just wanted to be sure I was in the game."

One of the trees was a young Purplefruit tree, and Roan found a straight rope-vine and cut off a good length from it, several times longer than he was tall. He tied a slip knot in one end and then coiled the rope and slung it in his belt. At the edge of the grove by the ditch, he picked a quarter-grown sapling and climbed up its straight trunk, hanging by his hands when it

began to bend, and edging along the length of the young, springy tree until the top of it bent down to the ground. Then carefully, using his full strength, he bent the tree all the way back on itself and used a length of the rope to tie the top to the lower part of the thin trunk. He still had plenty of rope left.

The gracyls gathered around and jeered. "That's a silly game," they said. "Who ever played that?"

"It's part of swoop ball," Roan said. "You just watch."

"Yah, yah," said the gracyl who had the ball at the moment. He was up in a nearby tree and he swooped to a lower branch. Then another gracyl swooped the ball away from him and Roan was twirling his rope as the last gracyl was flying across the grove with the ball.

He caught the gracyl around the leg in a beautiful loop and drew him in squawking.

Roan calmly took the ball away and threw it to another gracyl to start the game again, and trussed the lassoed gracyl to the sapling and slipped the rope, so the gracyl went sailing away over the ditch.

Roan climbed up the sapling and bent it again. It no longer stood straight but there was plenty of spring left in it. He looped his lasso again and caught the next gracyl that came sailing by.

"I seem to keep winning," Roan said, trussing the next gracyl to the tree, and slipping the rope again. This one landed right in the ditch, and scrambled out and made for home.

The gracyls could have played swoop ball higher up in the trees, where Roan's lasso couldn't reach them. Or they could have moved the game. But they didn't. This was where gracyls played swoop ball.

Roan took care of two more gracyls. "Give up?" he asked the rest.

"Yah, you can't even fly," they said and kept on playing exactly the same way. No one tried to take his rope away. No one tried to keep him from bending the sapling.

Pretty soon there were no more gracyls. The last one went sailing over the ditch and hopped off home, whining.

All except Clanth, of course, with his one undeveloped wing. He'd learned to sit and watch games.

"That was fun," Clanth said.

Roan tossed his rope into the muddy ditch and leapt across it and turned back to watch the deserted spot where the swoop ball game had been. He rubbed the mud off his hands down the sides of his trousers.

"I won," he said, and grinned, and went home to practice his reading.

III

Roan sat on the stoop of his house with a large book spread in his lap. It was entitled *Heroes of Old Terra*, and it was packed with shiny tri-D pictures of men and ships and great towering cities. It was a very old book. Some of the

pages were missing, but the pictures were still bright.

"Hey, c'mon," someone said. Roan's mind swam out from the book. Clanth, who was the nearest thing Roan had to a friend, stood waiting.

"Where?" Roan asked.

"Where!" Clanth flapped his one, useless wing. His black, leathery gracyl face was alight with excitement, the round amber eyes asparkle. "It's the Spring pre-mating. Out in the grove."

Roan's fair cheeks flushed, back to the root of his deep red hair. "Don't be ridiculous," he said. "But . . . good flying," he added, so as not to offend his friend. It might have been an offensive phrase to Clanth, because of his disability, but Roan had found that Clanth preferred for him not to be sensitive about it.

"I . . . Oh, I'm not like the others, either. But Clanth was handsome, gracyl handsome, and well developed for fourteen, and you noticed that before you noticed about his wing. And since he was in Studies, not Labor, it didn't make so much difference about the wing. "C'mon. Roan!"

"What would I do there?" Roan asked. "Provided I could get a female up a tree to begin with?"

"Well . . . wings aren't really necessary. At least I hope not. Look at me." And he raised his wingless right arm.

"I'd rather not try." Roan pictured the black, screeching little gracyl females. He was glad he didn't want one, because she'd

laugh at him if he did. Sneer at him. Flap her wings at him.

"But gee, here you are fourteen years old," Clanth persisted. "What are you going to *do*?"

"I'll wait," said Roan.

"For what?" Clath asked, and didn't wait for the answer, for a gaggle of fourteens went by and Clanth ran off to join them.

Roan watched them go, then sat with the book in his lap, gazing at the clouds and trying to picture a human female. The portraits in his books, the descriptions he'd read; he tried to put all his knowledge together, but it wouldn't add up to a definite picture. Every time he thought he had it, it slipped away from him.

Day wore into evening and still Roan sat, and he thought about human women and then about human men, and the old heroes of his book, who left human women to go out and find new worlds, and died showing there were places besides earth where human men could bring human women.

Human women were not like Ma. They were . . . Roan couldn't find the thought. He didn't know.

The gracyls had finished going by. The crowds of young males had gone out, and the crowds of ripening females. The first moon was still white in the sky, but it was brightening and soon the sickle anti-moon would come up and the ceremonies would begin. Roan wished Clanth well and hoped his female would not laugh too much at his poor wingless arm.

Another group of youths was com-

ing along; there was a low mutter of talk and laughter among them — and they were not gracyls.

"Supper!" Ma called. And came to the door. "What are you doing reading in that light?"

Roan peered through the gloom to see who was coming. The Veed. What were they doing out of their ornately decorated quarters in the heart of the town?

"Has there been a Veed murder or something?" Roan asked, because Ma always managed to know, without talking to anybody, what was going on in the adult world.

"If there has, I don't want to know about it and neither do you." said Ma, retreating further behind the front door. "You come on in. You don't want to tempt that trash to stop here."

But Roan waited to watch them go by, the young Veed, their scale-suits glittering faintly even in the tarnished twilight. They walked upright, looking almost human, talking their Veed talk.

"They're children," Roan said, and went in finally. "About my age."

"About fifty years old," Ma said, spooning stewed limpid seeds onto the grits on his plate. "That would be about half mature, for them."

"One of them was an aristocrat. I saw the iridion quadrant on his cheek." What magic lives they must lead, Roan thought, those Veed, with their painted porches and their gardens and their endless games of slots and colored beads, and their lives that stretched on forever.

"When will I die?" Roan asked, and Dad dropped his knife with a helping of purplefruit balanced on it.

"What made you ask that?"

"Nothing. I just wondered. I mean the Veed take forever to grow up and gracyls die if they get broken badly, but what about me?"

"You," Dad said. "Well, I've always answered you straight. You'll live a long time yet. Take me. I'm a hundred and eighty, and still got lots of years ahead. You'll live longer yet. You're prime Terry stock, boy."

"Even if I don't get broken or something? That's all I'll live? I'll just die?"

"There's a story," Raff said, picking up his knife and scraping the dirtied fruit off on the side of his wooden plate, "an old, old story that at the beginning of time the nine Gods called all the species of intelligent beings together and asked them which they preferred, a long life or a glorious one. Only Man chose the glorious life. And he's always been proud of it."

There was another sibilance of Veed going by outside and Roan scurried to the dark front window and saw a second group, headed the same way, toward the gracyl mating grove, the grove of trees by the ditch, where long ago Roan had used his lasso to win a game of swoop ball. The sapling was a tree with spread limbs now, and maybe Clanth would be waiting in it to drop down and catch his female.

The moonlight shown yellowish-pink now, and the garbage dump

outside the window was jeweled with it. It was Veed garbage, Roan thought, and for some reason this made him love the gracyls and hate the Veed.

"There's going to be trouble tonight," Roan said, and finished his dinner thoughtfully.

Raff silently got down his big hammer and nailed a panel on a bar of wood across each plastiflex window.

"No," said Roan, when Raff started to nail the door bolt from the inside. He wiped the last of the grits off his knife and stuck it through his rope vine belt. He pulled his tunic up short, so that it draped over his belt and left his legs free for running. Raff looked at him.

"Clanth's out there," Roan said.

"I'll be back after a while."

"Now, boy," Raff started. But Roan was already gone, out into the moonlight and the warm Spring night.

"Why did you tell him that silly story?" Bella asked, sitting in the darkened house and miserable at the thought of the long, dark hours before Roan might come home.

"Because," Raff said, "I think it's true."

IV

He knew something the Veed didn't know. He knew every shack and rock and ditch and garbage pile in the slum. As he came out of the house he sensed another group approaching, and he ducked

into a tunnel through the heaped garbage.

They were speaking Veed, their hushed, hissed tongue, so Roan could not tell all of what they were saying, though they passed so close he could have spit on them. But he did catch "gracyl" ("shryshl") and "Moon" which was the same word in all their languages.

If it were only the children out, that meant it was a lark, not a Hunt in retribution for some crime or suspected crime. "Ten half-breed for one Veed," was their rule. Half-breeds included anybody that wasn't Veed.

But this. This was children playing, or practicing.

Roan gave the Veed a good head start.

He went through the back yard of the funny, old, voiceless couple that kept mud-swine, and around another garbage heap, and through a series of gullies and then crept up the knoll that overlooked the ditch and the grove of trees where the gracyl were sporting.

In the grove, where the moonlight could pick them out through the trees, Roan could see the running gracyl, and hear their high, shrill calls. They had no thought for anything but each other. He even thought he could make out Clanth, flapping grotesquely in the tree that Roan had known as a sapling. And he thought he saw something else, very strange. It looked like a white figure, high in one of the trees, looking on very still.

Around the grove, in the ditch, the Veed boys were gathered in

full force, a ditch full of glittering Veed, swaying silently in unison! They must be almost ready for the attack.

Roan leapt to the top of the knoll and filled his lungs. "DANGER!" he screamed, and the gracyl began running about in the grove in confusion and making for the tree tops.

The Veed attacked immediately and furiously. No one seemed to have noticed that the scream had not come from within the grove. Roan was through the ditch and at the grove in seconds.

The Veed filled the grove now, furious, slashing about with their razor-sharp wrist talons. They had planned to attack the gracyls on the ground. With the gracyls in the branches of the branches of the dark trees, it was going to be harder, and less fun.

Roap crept forward and into and up the side of the dry ditch.

And got caught by a Veed as he started up the purplefruit tree on the edge of the grove. He'd thought it was a tree that brought him luck.

The Veed's raking hands curled around his thighs and he felt the blood spring out into a thin line of pain and he jerked the knife free of his belt and slashed the coarse Veed flesh and felt the hands recoil instantly.

In the brief moment this gave him, Roan was scrambling up, swinging on a rope vine to the next tree. Around him gracyls fluttered and squawked. The cry of the wounded Veed had brought his fel-

lows to his side. There were indignant conferences and hisses of outrage. No gracyl had ever dared to use a weapon against a Veed.

Roan listened, catching a word here and there. They were out without permission, because young Veed were always carefully protected. So they couldn't complain to their elders about the wounded Veed. This meant they had to take their vengeance on the spot.

But they couldn't get up into the trees because their bodies were too awkward for climbing and they couldn't throw things up into the trees without hitting each other.

Several of the Veed went over to one of the slenderest of the trees, where three gracyls hung in the branches like clumps of moss, and began pushing the trunk back and forth. The gracyls screeched, clinging tighter in their panic, and as the tree gained momentum, one of them fell to the ground, too panicked to try to fly.

The Veed were gleeful. It was like smashing the purplefruit off a tree.

Several Veed grabbed the gracyl and Roan carefully didn't watch what they did with him.

"Fly to the next tree." Roan called to the other two gracyls. "All you have to do is stay calm."

But they couldn't. They could only screech; the way gracyls always did when they were frightened. They couldn't change, even to save their lives.

Another gracyl fell.

Other Veed were starting on other trees.

"Make for the thickest trees,"

Roan called. "They can't shake the thickest ones."

But no gracyl moved. Roan burned with the frustration of it all, the helplessness of the gracyls and the blunt cruelty of the Veed. Where was Clanth? Perhaps he was already safe in a broadtrunked tree.

"Clanth!" he called, but there was no answer. Perhaps Clanth couldn't hear him, or perhaps he was clinging to a tree, squawking with terror, like the other gracyls. But he had always been a little different; surely he would save himself. Then Roan remembered. Clanth couldn't fly.

Roan's tree began to sway.

He looked around for a rope vine, to make it to the broader trees toward the center of the grove, but there was no rope vine. He cursed himself for not having cut one and looped it through his belt when he was in the first tree. But it was too late.

Well, it would be easy enough for him to hang on. He stood on one branch and held on to the next, watching the gleeful Veed below, their teeth gleaming as they smiled their crocodile smiles, their crests swaying contentedly.

Something dropped past Roan and fell into the waiting arms of a Veed. They gasped to see it and so did Roan. It was all white and for a moment Roan thought it must be a human child.

That was the moment he leapt.

He leapt for the back of the Veed holding the screaming white creature

and he drove his knife deep into the Veed's right eye, through to the brain, and the Veed died beneath him.

Roan pulled the knife out and stood on the dead Veed, the white creature clinging to his neck, and stood to meet the slashing blows of the other Veed.

But they backed away from him.

They were in awe and fear of him, that he had wounded one Veed and killed another. They had seen many a gracyl die, and that was funny. But they had never seen a Veed die before; they hadn't thought anybody could kill a Veed.

They fled to take revenge on more gracyls. It was safer.

Roan pulled the white creature from his neck and looked at it.

She was a white gracyl.

"I'm not dead," she said wonderingly. Gracyl fear didn't last long when the danger was over. "I knew I was going to be broken and I am prepared to die and . . . now I feel as though I must have died and here I am still alive."

"You're a half-breed?" he asked. "Or a mutation?"

"I'm an albino," she said. "You saved my life, didn't you? You did that on purpose."

Then they were silent a moment, looking at each other in the little moonlight. Caught in the brief bond of savior and saved, they tried to meet minds across the deeps and dimensions that separated their alienesses.

"I belong to you now," she said and clung to him, and he held her close and felt her whiteness and

kissed her strange, cold mouth and it was all a part of the swaying darkness and the hissing Veed and the dying gracyl and the death that Roan had made. The dead Veed and the victory.

Roan had lost the threads that bound him to himself and all that was left was the white gracyl woman under his hands in the sickle moonlight.

Across the grove, the gracyls were screaming as they fell but Roan was not thinking of them dying, only of the distant music of their voices.

"That one was Clanth," she said dreamily. "I was going to be his female and now . . ."

"Clanth!" Roan cried, and came to himself.

"Yes. Only Clanth. After all, I just took him because nobody else wanted me and now it doesn't matter."

"Doesn't matter!" He yanked her savagely to her feet. "Show me which way the scream came from! Show me where Clanth is." He had not been listening. He had been not caring. He had been as bad as a gracyl. Worse, because they couldn't help it and he could.

He saw the Veed beginning to leave the grove as they made their way through the trees. Either they had had all their fun or it was time for them to get back before their parents discovered they were gone.

"There he is," said the white gracyl female. "What do you want with him?"

One last Veed, seeing Roan, gave

Clanth a parting slash and moved sinuously off. Roan knelt by the dying gracyl. "Clanth, I couldn't find you. I couldn't help." But he hadn't looked.

"I'm broken," Clanth said. "But Roan, I had a female."

"I brought her to you." Roan said. He stood and put his knife at the white female's back until she came over to Clanth. "You can die in her arms."

"That was silly," she said when Clanth had died.

The gracyl, those that were left, were coming down from the trees now and incredibly starting their mating ceremonies again.

Roan walked away through the grove, and out into the white moonlight. He climbed to the top of the tallest garbage heap, and sat, looking down on the ghetto, not listening to the happy gracyl sounds, thinking about what a human woman might be like.

V

Here on the high ledge, the wind was sharp with sand particles, buffeting at him angrily like a gracyl when you held him upside down to show him that even if you don't have wings, you weren't something to throw chunckflowers at. Roan got to his feet, holding on tightly to the tiny fingerholds of the wind-worn carving, feeling with his toes for a firm grip. He was high enough now: over the tops of the purplefruit trees, he could see the glare panels strung out across the arena gate, spelling out:

GRAND VORPLISCH EXTRAVAGANZOO !!!

Renowned Throughout the Eastern Arm !!!

Entrepreneur Gom Bulj Presents:

Fabulous Feathered Flyers!

Superb Scaled Swimmers!

Horrific Hairy Hurlers!

A Stupefying Spectacle of Leaping Life-forms, Battling Boneless Beasts, Wingless Wizards of Wit, Frightful Fanged Fighters!

See Iron Robert, Strongest Living Creature—Stellaraire, the Galaxy's loveliest creation!

Snarleron, Ugliest in the Universe!

ADMISSION, G. CR. .10, plus tax.

Roan's hand twitched, wanting to go to his credit coder to check once more; but he restrained it. He knew what it would show. The balance gauge would barely show. Even the five demi-chits he'd earned stacking bread-logs for the Store was gone, spent for dyewood billets for carving. He'd have to be satisfied with what he could see from here—not that that would be much. He could hear the noise-makers faintly, but the dusty grounds of the arena were mostly obscured by the trees and the high wall, crumbling along its top like all the Old Things, but still high enough to shield the marvels from his view.

But on the other side, there, where the great white-boled Never-never tree grew . . .

It was outside the Ghetto, beyond the Soetti quarters, where Dad had told him never to put a foot—but the tree spread wide, almost to the rubble-littered top of the

wall, where it dipped down in a sort of notch.

He wouldn't really be going into the Soetti Quarter—just passing through.

Then minutes later, Roan perched in an arched opening, just above the lower gates. He was breathing a little fast from the quick climb down. He checked to be sure no heavy old gracyl mares were stretching their atrophied wings on nearby balconies. Then he jumped, caught at ancient green-scaled tiles, scrambled up to a position astride the steep gable of the first house. From the balconies below, he heard a clatter of food troughs, a few shouts, a lazy pad of feet, the slam of a door. The oldsters' early-evening siesta was under way, and everyone else was at the Extravagan-zoo.

He rose, ran lightly along the ridge tiles, jumped the gap to the next house. There were carved devils at ten-foot intervals here; he had to drop flat at each one, work his way under, then up again. At the end, he swung down under the eave, dropped to a shed below, then swarmed up the carved gable end of the next house. But then it was easy. A series of wind-god altars, like stepping stones, led to the end of the last house before the high, black-glazed Barrier. He jumped for a drain-ledge, worked his way along to a down-gutter, held on with his fingers and slid quickly to the yellow dust of the path. Roan grinned to himself. All those years of playing with the gracyls had almost taught him how to fly.

The burrow under the Barrier was almost choked with rubble and blown pricklebushes; it had been a long time since he and Yopp, a Fustyan eggling, had last explored it. Maybe he was too big now; he grew so fast—like a Soetti, Raff had said once, grumbling at having to cobble new shoes so soon after the last ones.

But it was all right. Once the last pricklebush was dragged clear, Roan went in head-first, pulling himself along with his hands until he came to the straight-up part. Then he stood, put his back against one wall and his feet against the other and walked up.

The iodine-smell of the Soetti was strong, even before he reached the top and pulled himself out into the hazy, late orange sunlight, filtered dark by the great, sagging, patched nets the Soetti used to hold in their kind of air. Roan lay flat, breathing close to the ground. When he had his lungs full—even though they burned a little, from the bad Soetti air—he jumped up, ran for the high fences barely visible in the gloom at the far side of the quarter.

He was halfway there when a big Soetti—almost five feet high—in greaves, a flared helmet with black eye-shields, and a heavy cloak, popped out of a hut in his path, blocking his way, heavy pincers ready. Roan slid to a stop, watching the violet-freckled claws. They looked too massive for the short, spindly Soetti arms, but Roan knew they could cut through quarter-inch chromalloy plate.

From burrows all around, bright Soetti eyes winked, ducking back as he looked their way. The warrior advanced a step, snapping his claws like pistol shots, pow! pow! Roan stooped, picked up a four-foot stick of springy booloo wood. He waved it at the Soetti. It hissed, its arms twitching in instinctive response to the movement.

It saw what Roan was trying to do, and backed quickly; but Roan moved in, flicked the stick almost under the Soetti's faceted eyes. The pincers flashed, locked on the wand, as involuntarily as a wink; and Roan jerked the stick hard, throwing the warrior off balance. He dropped the stick and sprang past the creature, sprinting for the board wall, laughing as he ran.

The Never-never tree was three yards thick at the base, rising like a column of buttressed white stone set with daggers of crystal-line lime. It wasn't hard to climb, as long as he just held on with his knees and elbows and didn't touch the spines. The branch that reached out to the wall wasn't very big, but it would probably hold all right—even with the weight of a sixteen year old Man on it.

Roan started up. The first fifty feet was simple enough, the spines were as big as Roan's wrist, set well apart; he could even use them as footholds.

He reached for a higher grip—and a spine broke under his foot. His hand snapped out to seize a razor-edged spine while his knees gripped the narrowing buttress be-

tween them. Pain tore through his hand and snaked down his arm, red pain and blood. Roan hated the dumb way his hand had grabbed, like the Soetti's claws, at whatever came near. The Soetti's claws couldn't learn but maybe Roan's hand could, if it hurt enough. And it did hurt enough and now it was slippery as well.

Pain was a taste of death in Roan's mouth, like the time he'd broken his foot. But something else Roan could do was force himself to forget things. He ignored the hand and went on.

The branch that stretched over the wall had patches of peeling bark adhering to it. Roan brushed them away before stepping out on it. He couldn't take a chance on losing his footing; with his slippery hand, he might not be able to hold on if he fell. He wiped his hand again on his tunic, then clenched it to hold in the pain and the blood.

The branch moved gently underfoot as he walked out on it, swaying to the gusty wind, and dipping now under his heavier weight. Raff was right; he did grow too fast. He was heavier than an old gracyl brood-master. The tip of the branch was level with the top of the wall now; and now it dipped lower, the shiny blue leaves at its tip clattering softly against the weathered masonry. But he was close now. The whine and thump of the noise-makers was loud above the chirp and bellow of the crowd beyond the walls, and he could see the blue-white discs of the polyarcs glaring on the dusty midway.

The last few yards were hard going. The tiny spines were close together here — and sharp enough to stab through his bos-hide shoes. If the slender bough sank much lower under his weight, he wouldn't be able to reach the wall. But he knew. He knew from the gracyl games how much weight a tree limb could hold.

Balancing carefully, Roan started the branch swaying, down, up, in a slow sweep, down, heavily, then shuddering up

On the third upward swing, Roan jumped, caught the edge of the wall, raked at loose rubble, then pulled himself up and lay flat on the dust-powdered surface, still hot from the day's sun.

He opened his hand and looked at it. The blood had formed a blackish cake with the dust. That was good; now maybe it would stop running all over things and spoiling his fun. He patted it in the dust some more, then crawled to the edge of the wall and looked over into the glare of the grounds.

Sound struck him in the face like a thrown chunkflower: the massed roar of voices, the shrill clangor of the noise-makers, the rustle of scaled and leathered bodies, the grating of feet — shod, horned, clawed, hooved. The cries of shills and hucksters

It was dark now. Twenty feet below Roan, the heads of the crowd stretched in a heaving sea of motion, surging around the pooled light of the midways, alive with color and movement. There, a jeweled harness

sparkled on tandem-hitched bull-devils; there a great horned body, chained by one leg, pranced in an intricate dance; and beyond, caged dire-beasts paced, double jaws gaping.

Roan forgot to breath, watching as a procession of scarlet-robed creatures with golden hides strode into view from a spotlighted arch, fanned out to form a circle, dropped the red cloaks, and rushed together, cresting up into a living pyramid, then dropping back to split and come together like a wave breaking against a wall, and then

He had to get closer.

He raised his head and looked along the broken wall, following its great arc to the far side where it loomed black against the luminous amber twilight. He could jump down easily enough, but not without landing on a bad-tempered gracyl or a wide-jawed Yill.

He rose and moved off, stepping carefully among the rubble. It was almost full dark now. Ahead, he made out the heavy sagging line of an anchor cable, its end secured to a massive iron capstan set in the stone coping. He clambered up, followed the cable with his eye as it dipped, then rose up to meet a slender tower.

This was almost too easy. The base of the tower was hidden in shadow behind a cluster of poly-arcs. No one would notice if he walked across and slipped down there

He stepped out on the taut cable. It was much easier than the branch had been; it was only as

big as his finger, but it was steady. No one looked up from below. He was above the polyarcs, invisible against their glare.

He walked out across the crowd, reached to tower, swung down.

A hand like an iron clamp locked on his ankle.

He looked down. A face like a worn-out shoe blinked up at him. Gill-flaps at either side of the wide head quivered.

"Come down, come down," a curious double voice said. "Caught you — ought — you good — ood."

Roan held on and pulled; it was like trying to uproot an anvil tree.

"Let's go," he said, trying to make his voice sound as though it were used to being obeyed by beings with old-shoe faces and hands like ship-grapples.

"You're — re — going to see — ee the boss — oss." The iron hand — which was bright green, Roan noticed, and had three fingers — tugged, just gently, and Roan felt his joints creak. He held on.

"Want me — ant me to pull — ull your leg — eg off — off?" the hollow voice echoed.

"All right," Roan said. He lowered himself carefully until his other foot was on a level with his captor's head. Then he swung his free leg back and kicked the creature in the eye.

The grip was gone from his ankle, and he leaped clear, landed in dust, turned to duck away —

And slammed against a wide, armored body that gathered him in with arms like roots of the grizzly-wood trees.

It was dark inside the big tent, and hot, and there were odors.

Roan stood straight, trying not to think about the way his hands were numb from the grip on his wrists. Beside him, the shoe-faced creature flapped its gills, blinking its swollen eye. "Ow — ow," it said, over and over. "Ow — ow."

The being behind the big-scarred, black-brown desk blinked large brown eyes at him from points eight inches apart, in a head the size of a washtub, mounted on a body like a hundred gallon bag of water. Immense hands with too many fingers reached for a box, extracted a thick brown cigar, peeled it carefully, thrust it into a gaping mouth that opened unexpectedly just above the brown eyes.

"Some kind of Terry, aren't you?" a bass voice said from somewhere near the floor.

Roan swallowed. "Terry stock," he said, trying to sound as though he were proud of it. "Genuine original Terrestrial strain," he added.

The big head waggled. "I saw you on the wire. Never saw a Terry walk a wire like that before." The voice seemed to come from under the desk. Roan peered, caught a glimpse of coiled purplish tentacles. He looked up to catch a brown eye upon him; the other was rolled toward the gilled creature.

"You shouldn't have hurt Ithc," the deep voice rumbled. "Be quiet, Ithc." The wandering eye turned back to Roan. "Take off your tunic."

"Why?"

"I want to see what kind of wings you've got."

"I don't have any wings," Roan said, sounding as though he didn't care. "Terries don't have wings; not real original Terrestrial stock, anyway."

"Let's see your hands."

"He's holding them."

"Let him go, Ithc." The brown eyes looked at Roan's hands as he opened and closed them to get the blood going again.

"The feet," the basso voice said. Roan kicked off a shoe and put his foot on the desk. He wiggled his toes, then put his foot back on the floor."

"You walked the wire with *those* feet?"

Roan didn't answer.

"What were you doing up there?"

"I was getting in without a ticket," Roan said. "I almost made it, too."

"You like my little show, hey?"

"I haven't seen it — yet."

"You know who I am, young Terry?"

Roan shook his head.

"I'm Gom Bulj, Entrepreneur Second Class." One of the broad hands waved the cigar. "I'm owner of the Extravanzoo. Now—" the heavy body hitched forward in the wide chair — "I'll tell you something, young Terry. I haven't seen a lot of Terries before, but I've always been a sort of admirer of theirs. Like back in ancient times, the wars and all that. Real spectacles." Gom Bulj thumped his desk. "This desk — it's made of Terry

wood — *woolnoot*, I think they call it. Over six thousand years old. Came out of an old Terry liner, a derelict on —" He cut off.

"Never mind that. Another story. What I'm getting at is, how would you like to join my group, young Terry? Become a part of the Great Vorplisch Extravanzoo; Travel, see the worlds, exhibit your unusual skills to appreciative audiences of discerning beings all over the Western Arm?"

Roan couldn't help it: he gasped. "Not much pay at first." Gom Bulj said quickly. He paused one eye on Roan. "In fact, no pay — until you learn the business."

Roan took a deep breath. Then he shook his head. Gom Bulj was still looking at him expectantly.

"No," he said. "Not until I ask Dad." Suddenly Roan was remembering Ma, waiting, with his dinner ready now, and Raff. Raff would be worried, wondering where he was.

"I've got to go now," he said, and wondered why he had such a strange, sinking feeling.

Gom Bulj drummed his tentacles under the desk. He sucked on a stony-looking tooth, eyeing Roan thoughtfully.

"No need to trouble old Dad, young Terry. You're big enough to leave the burrows, no doubt. Probably he'll never miss you, new litters coming along —"

"Terries don't have litters. Only one. And Ma only had me."

"You'll write," Gom Bulj said. "First planetfall, you'll write, tell

them what a mark you're making. A featured sideshow attraction in the finest 'zoo in this part of the Galaxy."

"I'll have to ask Dad's permission first," Roan said firmly.

Gom Bulj signaled with a finger. "You'll surprise him; come back some day, dressed in spangles and glare-jewels—"

Ithc's reaching hand grazed Roan's arm as he ducked, whirled, darted for the tent flap.

Something small, with bright red eyes, sprang in front of him; he bowled it over, ran for the tower, darting between the customers milling in the way between the bright colored tents under the polyarcs. He veered around a cage inside which a long-legged creature moaned, jumped stretched tent-ropes, sprinted the last few yards—

A hulking, gilled figure—a twin to Ithc—bounded into his path. He spun aside, plunged under an open tent flap, ploughed through massed gracyls who hissed and struck out with knobbed wing bones. A vast gray creature with long white horns growing from its mouth teetered on a tiny stand. It trumpeted nervously and swung a blow with a heavy gray head-tentacle as Roan darted past; then Roan was under the edge of the tent, up and running for the wall. Behind him, an electric voice crackled, deep tones that rattled in a strange tongue.

He saw the gate rising up, light festooned, above the surging pack. To one side, another of the gilled creatures worked its way toward him,

knocking the crowd aside with sweeps of its three-pronged hands. Roan threw himself at the mass before him, forcing passage. Another few yards—

"Roan!" an agonized voice roared. By the gate, Raff's massive white-maned head loomed over the crowd. "This way, boy!"

"Dad!" Roan lowered his head, threw himself against the slow-moving bodies in his way. The gill-thing was close now—and there was another—

And then he was at the gate, and Raff's hand was stretched out to him above the crutch.

The gilled creature thrust itself before Roan, arms spread wide. Roan whirled and saw the other—and beyond, a third, coming fast. He fainted, dived between the two nearest.

The steel grip caught his arm. He looked up into the old-shoe face, swung his doubled fist.

Both hands were caught now. He kicked, but only brushed his toes against the horny shins.

And then Raff was there, his brown face twisted, his mouth open. Over the mob road, Roan couldn't hear what he was shouting. He saw Raff's thick arms swing up. The crutch came down in a crashing arc on the gilled head, and for an instant the grip loosened, and Roan pulled a hand free.

And then a gray-green figure loomed behind Raff, and a three-fingered hand struck, and now Raff's face was twisted in a different way, and he was falling, going down, and the white head was flushed

suddenly crimson, and he lay in the yellow dust on his face, and Roan felt his throat screaming —

His hand was free, and he struck.

He felt something yield, and ripped at it, feeling his jaws open, teeth hungry for the enemy. Then both hands were free, and he smashed at the old-leather face, seeing it reel back. And then the other was at him with three-taloned hands clutching. Roan seized two long fingers in his two hands and tore at them and felt them break and rip —

And then he was falling, falling, and somewhere voices called, but they were far away, too far, and they faded, and were gone.

And he was alone and very small in the dark.

VII

Gom Bulj's diamond stickpin glittered like his eyes, and he smoked his cigar as though he had tasted and wearied of all other cigars in the Universe.

"You're a wild one, Terry," he said, both eyes staring at Roan. "What was the idea of crippling up Ithc? You should see his hand. Terrible!"

"I hope he's ruined," Roan said, not crying, not thinking about the ache that made the side of his head feel as big as Gom Bulj's. "I wish I'd been able to kill him. I *will* kill him the first chance I get."

He had to stop talking then, remembering Dad, trying to help, then falling.

"There was no need for dramatics. No need at all. If you'd come along quietly, you'd have found life in the Extravanzoo most rewarding — and I'd still have the use of Ithc. Did you know you nearly tore his finger off?"

"He killed Dad," Roan said.

Now there were tears. His face tried to twist and he felt dried blood crack on his skin; but he stood as straight as the Ythcan's grip on his arms would let him, and looked Gom Bulj in one eye, the other being busy now with some papers spread on the desk.

"I know everything you're going to say," the entrepreneur said, "so don't bother to say it. Just let me indicate to you that you are a very lucky Terry, Terry. If you weren't a valuable Freak, I'd put you out the nearest lock for the trouble you've caused me. But I'm a business man. You'll start in as a scraper-punk and double in greenface." He jerked his huge head at the three-fingered guard. "Take him along to a cubicle on number two menagerie deck with the other Freaks. And see there's a stout lock on the door."

Green arms like cargo cranes turned Roan and propelled him into the corridor. The vibration of the engines and the stink of ozone were more noticable here than in the deep-carpeted office of the 'zoo owner. For a moment Roan felt a surge of excitement, remembering that he was aboard a ship, in deep space. He wanted to ask where they were bound, how long the voyage would last, but he wouldn't

ask the Ythcan. He might be one of the one's who'd helped to kill Raff. Roan couldn't tell them apart. But there was one he would recognize.

Roan sat in the limp hay that was his bed. The metal-walled cell smelled of animals and old air. He was sore all over but his mind was clear, and he listened to the sound that had awakened him with a feeling of suspense that was almost pleasurable.

Something was working at the latch to his door.

He looked about for a weapon, but there was nothing. Nothing but four stark walls and the used hay. Not even clothes. They had taken his tunic away. He thought, I'll have to fight with my hands and teeth, and he crouched, ready.

But the door didn't open. Instead, a metal panel swung back. Suddenly Roan was looking through bars into ochre eyes in an oval face with skin as pale and smooth as a Tay-tay leaf, and a cloud of soft hair the color of early sunshine.

She laughed, a sound like night rain, and Roan stared at the soft red mouth, the white teeth, the tip of a pink tongue.

"You're . . ." Roan said, "you're a human woman!"

She laughed again, and he saw a delicate purple vein that throbbed faintly in her white throat. "No," she said in a voice like the murmur of evening wind in the crystalline leaves of the Never-never tree. "I'm a mule."

Roan came close to the barred

window. He looked at her: the slender neck, the shapes of yielding roundness under the silver clothes, the tiny waist, the long, slim lines of her thighs.

"I've seen pictures," Roan said. His voice seemed to catch in his throat. "But I never, ever saw . . ."

"You still haven't. But Pa said I could pass for Pure Strain in a bad light." She put her hands on the bars. They were small and smooth. Roan put out a hand and touched her.

"A mule's a cross between two human strains that never should had got mixed up together in the first place," she said carelessly. "Mules are sterile." She looked at him.

"You've cut your head. And you've been crying."

"Will you —" Roan started, and swallowed. "Will you take your tunic off?"

The girl looked at him, still smiling, and then the pale cheeks suddenly were pink. She laughed, but it was a different laugh.

"What did you say?"

"Please — take off your tunic."

For a long moment the ochre eyes looked into Roan's blue ones. Then she stepped back from the door, her soft hand slipping from under Roan's for a moment. She did things to the silver garment and it fell away, and she stood for a moment poised and straight, and then she turned slowly, all the way around.

Roan's breath came hard through the turmoil in his chest.

"I never dreamed anything could be so beautiful," he said.

The girl drew a quick breath, then bent, snatched up her garment, and was gone. Roan pressed his face to the bars, caught a glimpse of her as she darted past a lumbering, bald humanoid who turned and stared after her, then came clumping up to the cell door. He looked angrily at Roan.

"What the hell's wrong with Stel?" he barked. He looked down, clattering keys. "All right, Terry, the vacation's over. I'm Nugg. You work for me. I can use some help, the devil knows."

The door clanked open. Roan stepped out, measuring the alien's seven foot height. The creature raised a fist like a stone club.

"Don't get ideas, runt. Just do your work and you'll get along. You'll need some shoes, I suppose. And a tunic. Around this place clothes are the only way to tell the Freaks from the animals."

"Who was she?" Roan said. "Where did she go?"

Nugg glared at him. "Keep your mind off Stel. Stellaraire, to you. She dances. She's got no time for Freaks and scrapers. I know about you; you're a mean one. You watch your step, Terry, and tend to your scraping—and your greenface. Now come on."

Roan followed the hulking humanoid along the echoing corridor, noisy with the rumble of ventilators, the clamor of voices, the thump of feet, to a dingy room of shelves heaped with equipment. Nugg hauled a large duffel bag of used clothing from a locker and dumped it out onto the floor.

Roan discarded a bra affair that might have fitted a midget Stellaraire, a zippered tube that seemed to be made of human skin, a hexagonal wired corset, and a gauze veil before he came up with a simple buttoned tunic only a few sizes too large. But he found a marvelous belt made of flexible metal links that fitted itself perfectly to his waist. He also found a pair of heavy hide sandals.

Nugg grunted. "Get down to C deck. One of the boys will tell you what to do. And stay out of trouble!"

Roan rode down the lift, stepped out into a sour reek of stables, a vast, still room echoing with grunts, squeals and the shuffle and clatter of hooves and the pad of horny feet. Through bars he saw shaggy pelts of black and pink and tan, glistening hides, scaled, knobbed, smooth, the flash of light on horns, tusks, fangs, the curl of sinuous tails, the reach of taloned limbs, and tentacles that groped restlessly.

"You—oo son of a bitch—itch," and echoing voice said.

Roan turned. On the other side of a massive grill a seven-foot Ythcan glowered, one three-fingered green hand thrust through the bars, the thick fingers closing futilely an inch from Roan's tunic. The other hand was a round knob of dirty bandages.

Roan stepped back and looked around for a weapon. Ithc raised his maimed hand and shook it. "It wa—as my skilled—illed hand—and. You—oo've ruined it for life—ife."

"Good," Roan said. "I'm going to ruin the other one too."

"You — oo wait there — ere," Ithc said, moving along the grill. "I'm — mm coming to kill — ill you — oo."

There was a long-handled pitchfork against the bulkhead with straw and dung matted in the tines. Roan clanged it against the steel wall and ran to meet Ithc. A wide gate at the end of the grilled wall stood open. The Ythcan halted just beyond it and Roan stepped through, the pitchfork raised.

Ithc made a sudden motion and the heavy, motor-driven grill slammed against Roan, knocked him off his feet, pinning him in the opening. The Ythcan planted a horny, three-toed foot against Roan's chest and with his good hand drew a knife from behind him. He clicked a catch. The blade guard dropped off the knife. What was left was a glistening razor that made Roan bite his teeth to look at.

"I'll — ll cut your wrist tendons first — irst," Ithc said. He leaned close, just out of reach of Roan's hands. His gill flaps rippled, flushed pink. "Then — en I'll do your eyes — ss . . ." He held his bandaged hand before him for balance, weaving the blade to and fro.

Roan was watching the dagger. Every time it moved, he had his hands ready to grab. With a sudden, unexpected motion the Ythcan jabbed for his shoulder.

Roan struck out — and the Ythcan jumped back, holding his bandaged hand. A red stain grew on it. Roan's

hand tingled from the blow he had struck.

"Ow — ow," Ithc keened. "Ow — ow." He stepped back, holding the dagger by the point now and lining it up with Roan's left eye. Roan got ready to dodge, then realized that was what he was supposed to do. The Ythcan would throw for some other spot.

There was the clank of a door, then the sound of running feet along the corridor.

Stellaraire's woman-voice rang. "Ithc, you smelly animal! Get away from that gate. Let him up!" She was standing over Roan, long, thin legs planted astride him, fists on rounded hips. Ithc held up his blood-stained bandage.

"Because of him — im I lost — ost my job — ob. Now I'm just a dirty scraper — aper."

"You'll be worse than that if I tell Gom Bulj about this!" She pushed at the heavy gate.

"He hurt me — ee." Ithc said. "Ow — ow." But he let the gate come open. Roan rolled over and sat up. He looked at the pitchfork, and the girl followed his look.

"Terry, you've got to promise me you won't start it again."

"I'm going to kill him." It was hard for Roan to breathe. His ribs hurt.

"He would have killed you if I hadn't made him let you up. Now call it square!"

Roan looked at her. "Maybe he would and maybe he wouldn't. He doesn't move very fast."

"Look, you've got to forget what happened. He's too dumb to hate."



"Hey — ey," Ithc started.

"You shut up," Stellaraire snapped. "Now go on, get out!"

Roan watched Ithc move off holding his bad hand in his good one. "All right," he said. "I'll leave him alone—until the first time he bothers me." He lay back against the cold metal floor, wanting to moan, but not wanting the girl to see how much pain hurt him.

"I have to get to work."

Stellaraire's hand was cool on his forehead. "You take it easy a minute, honey."

"By the nine Gods, you're a real sucker for punishment. You stay where you are, till you get your breath."

"He's still walking. So can I."

"You don't have to tell me, sugar. You're a tough one. I saw the fight when they caught you. The Ythcans don't have much brains, but they're awfully strong. I saw Ithc's hand before they bandaged it. It's ruined for life. I've never seen anybody fight like that before, and believe me, I've seen a lot of fights in my carny days. What made you so mad?"

Roan sat up, remembering, feeling the hot tears ready behind his eyes. "My father," he said. "They killed my old man."

"Ah, sweetie, that was a lousy thing to do." She was kneeling, cradling his head in her arms. "Go ahead; it feels better if you cry. But you fixed that Ithc good. He can't be on Security any more; not with that hand. Gom Bulj has already sent him down here as a scraper."

"He didn't have to kill Dad," Roan said. "My father was a cripple. He was crippled defending me before I was born."

"How much real Terry strain do you have?" Stellaraire asked. "Your mother?"

"I'm all Terry." Roan said. "Raff was only my foster father. Ma wasn't really human. They lived all their lives in a garbage dump on account of me and Dad got killed on account of me. And Ithc walks around with nothing, but a bad hand."

"My folks were a funny pair," Stellaraire said. "Pa was a water miner on Archo Four. He came of one of the Ganny crosses. Real short, like, and he could go fifteen minutes without taking a breath—and o' course real course skin. Mother came from Tyree's World. She was dark, with light hair, and real slender. I've got her eyes, but outside of that, I'm a kind of a throwback, I guess."

"You're beautiful," Roan said. "I love your eyes. If . . . if it wasn't for Dad, I'd be glad they kidnapped me."

"That's right." Stellaraire smiled. "Just think about the good part."

"I've never had a friend before," Roan said. "A real friend."

"Gee," said the girl, and her eyes grew round like a child's. "Gee, I could make you a list ten miles long of all the things men have called me since I've been with the 'zoo, but this is the first time it was 'friend.'" Her hands moved gently over his chest

and arms. "There are the oddest things about you. This fuzz; what's it for?" She touched his cheek. "And your face is prickly."

"That's my beard. I have to shave nearly every day."

"I like it. It gives me nice shivers to get scraped with it. But I wonder what kind of adaptation it was supposed to be for. Open your mouth." The girl looked at Roan's teeth.

"You have such nice, white teeth — but so many of them." She counted. "Gosh, thirty-two." She looked thoughtful, moving her tongue inside her mouth. "I only have twenty-six."

"The better to eat you with, my dear —"

The grilled door slammed open. A thick, boneless gray arm with a mouth at the end of it reached in, groped over Stellaraire, then curled around her and pulled her to the door.

"Stellaraire!" Roan gasped, and jumped to his feet, grappling the arm.

But Stellaraire was laughing, perched in the curve of the massive tentacle. Beyond the doorway, Roan saw a vast creature like a mountain of gray rock. The girl put a foot on a great curved tusk, stepped up to the enormous head.

"It's just Jumbo. He knows how to work the lift and sometimes he gets loose." Jumbo reached his mouthed arm into a bin and came out with a wad of hay which he stuffed into the other mouth, under his single tentacle.

"Stel!" a rasping voice called.

"Get that damned bull back down where he belongs." The bald humanoid, Nugg, came stamping up. He looked angrily at Roan.

"Stel, this Terry's dangerous. You stay away from him."

"You're not talking to your scraping crew now, Nugg." Stellaraire said sharply. "Don't go giving me orders. And you'd better keep an eye on Ithc. He started trouble with the kid here."

Nugg looked angrily at Roan. "All right, you. Get to work. I told you —"

"He's not working today. He might have busted ribs; that damned Ythcan goon slammed the door on him. I'm taking him to the vet right now."

"Look here, Stel —"

"Tell it to Gom Bulj. Come on, Terry."

Roan looked up at the elephant, then up at Stellaraire. He put out a hand and touched the gray hide, then stepped into the curve of the trunk and was lifted up beside the girl.

"This is the strangest-looking creature I ever saw," he said, trying to sound casual. "And you don't have to call me Terry. My name's Roan."

He held on as the bull turned ponderously, swayed off along the corridor.

"And I don't need to go to any vet," he added. "I'm all right."

"Suits me. I'll take you to my room and clean you up. You smell like a scraper already. And I want to take a better look at that cut on your face."

Roan's eyes opened wide when he saw Stellaraire's quarters. The single room, three yards by four, had a low ceiling which shed a soft light on three walls decorated with patterns of flowers, and a fourth which was a panel of greenish grass behind which small vivid fish waved feathery fronds, moving with dreamlike slowness through an eerie miniature landscape. There was a low couch by one wall, a table of polished black wood, a carpet of soft gray into which Roan's feet seemed to sink ankle deep.

He drew a breath, wrinkling his nose "It smells — pretty," he said. "I never smelled a pretty smell before."

"It's just perfume, silly. Sit down — over there on the bed. I'll get some medicine."

Roan waited quietly while the girl cleaned the deep scratch on his cheek, painted it with a purple fluid that burned like cold fire and sprayed a bandage in place.

"There. I'm as good a yet as Grall any day. I ought to be. I've done enough of it. Now go in there —" she pointed — "and take a bath."

Roan went to the door and looked in. There was a large basin in the floor, with glittering knobs and spouts around it.

"I don't see any water."

Stellaraire laughed. "You're such a baby — except when you're mad. Here, just turn this." Water churned into the tub.

"Now take off your tunic and get in. You *do* know how to scrub yourself, I hope."

Roan stepped into the warm water. "This is strange," he said. "Taking a bath inside a room. I always used to go to the river"

"You mean right outside — with fish and things bumping into you? And mud? How could you ever do it?"

"It was nice. And fish don't bump into you. I could swim right out across the water to the other side, and lie on the bank and look up at the sky. But this is nice, too," he added.

"Here, I'll do your back. That Nugg, putting you in that dirty pen where they used to keep the mud-pig until he died! I'm going to tell Gom Bulj a thing or two. You'll have a room right by mine. You're a valuable Freak, Roan. What's your act?"

"Walking a wire. Gom Bulj said Terries aren't supposed to be able to, but I don't have any trouble"

Stellaraire shuddered. "I'm afraid of heights. But you said you grew up among those flying things — Grapples or whatever they are. What's he paying you?"

"I don't know. Nothing, I guess, until I learn the business."

"Ha! We'll see about that. Why, you're the only real Terry in the show. Don't say anything to Gom Bulj about the extra teeth and he'll never know the difference."

"I don't want anything from him. I'm going to get away as soon as I can, and go . . . go . . ."

"Yeah, sweetie, go where? You'd have to earn passage money back to Tambool—and believe me, it costs plenty. You'd better stick with the show at least until you've saved some money—and I'll see that you're paid what you're worth."

"I don't want you to get in trouble."

"Don't worry about Gom Bulj. He's really a kind of nice old cuss, after you get used to that tough talk. He's so used to these tough Geeks he thinks he has to talk that way to everybody. But he doesn't try it with me."

Roan dried on a huge soft towel that smelled as sweet as the room, and dressed in a clean tunic that Stellaraire took from a locker filled with bright clothes.

"Come on," she said. "I'll show you around the ship. It used to be a Terran ship, you know. It's over five thousand years old."

For an hour Roan followed the girl along endless corridors filled with hurrying creatures, sounds, colors, odors, through vast, echoing halls which Stellaraire said had once been ballrooms and dining areas, up wide staircases and down narrow companionways, to a broad, curved room with a wall of ink-black glass set close with brilliant points of colored light.

"You mean . . . that's the sky?" Roan said, and watched the fantastic array of slowly proceeding lights, realizing for the first time what it meant to be in space. So much nothingness there! He looked around the rest of the room. A vast array of instruments and dials and a door

with a red glare that said **BATTLE-CONTROL — AUTHORIZED PERSONNEL ONLY.**

"What's all that?" he asked. "And who does the controlling in that room?"

"All that's not anybody's business. Nobody goes in that room and nobody knows what all that's for. It's separate from the guidance system. This was originally a Terran warship and all that's for fighting. Gom Bulj says it works automatically if we run into another warship. But that isn't likely. The thing to remember is not to touch any buttons or switches and not to go into that little room."

Roan went over to look at the instrumentation closely. *His* people had built this ship and old heroes had flown it, fought in it.

"I've got something a lot more interesting than that to show you," Stellaraire said. "Come on. I want to show you Iron Robert."

"Who's Iron Robert?"

Stellaraire laughed and shuddered at the same time. "Wait and see."

They rode a lift, passed along a hall which vibrated with the thunder of the idling main drive, went through a high-domed room where several dozen ill-assorted beings sat in a group, puffing and thumping strange implements. Roan winced at the din of squealing flutes, blatting horns, clacking tambourines, whining strings.

"What's all this noise for?" he called over the cacophony.

"Oh, a band is traditional with a 'zoo. It goes back to Empire

days. The old Terrans used to always have noise-makers with social events. Some of our instruments even date from then."

"It's terrible!" Roan watched a short, many-armed being in yellow silks puffing away at a great bass horn.

"Gom Bulj says the Terry noise-makers used some kind of charts, so they all made the same noises together, but our fellows don't know how to read the charts. They just make any old noise."

"Let's get out of here!"

Nine decks below, in an armor-plated hold where heavy cargo had once been stored, Stellaraire took Roan's arm, nodded toward a wide aisle which led back into gloom.

"It's along here," she said. "He has the whole last bay."

"Why are you whispering?" Roan was looking around at the battered bulkheads. "I didn't know anything could make dents in Terry metal. What happened?"

"This is where Iron Robert exercises for his fights. And who's whispering? Come on." She led the way along the unlit passage, stopped before an open bay which was a cave of deeper gloom.

"He's in here," she whispered. She was still holding Roan's arm, tighter than before. He went closer, wrinkling his nose at a faint odor of sulphur, peering into the darkness. He could see dim walls, an object like an oversized anvil in the center of the floor, and near one wall an immense lumpy shape that loomed up like an incomplete statue in grey stone.

"He's not here," Roan said. "There's nothing here but an old boulder."

"Shhh — " Stellaraire started.

The boulder moved in the shadows. It leaned forward, and Roan saw two bright-faceted jewels near the top, that caught the light and threw back a green glint. There was a low rumble that seemed to come from the bottom of a volcano.

"Why you wake Iron Robert up?"

"Hello, Iron Robert," Stellaraire said in a squeaky voice. "I . . . I wanted our new Freak to . . . to meet you . . . He's a Terry, sort of, and he's going to do a wire-walking act and double in green-face . . ."

Her voice trailed off. Her fingers were digging into Roan's arm now. He wanted to take a step back, but she was half behind him, and he would have to push her out of the way, so he stood his ground and looked into the green eyes, like chips of jade in an ancient idol.

"You mean new Freak want to look at old Freak. Go 'head, Terry, take good look. Iron Robert strongest living creature. Fight any being, any time, any place." The giant's voice was a roll of chained thunder.

Stellaraire tugged at Roan's arm.

"We . . . uh . . . didn't mean to bother you, Iron Robert," she said breathlessly. She tugged again, harder. But Roan didn't move.

"Don't you have any lights in this place?"

The dark shape stirred, rose up in the shadows, nine feet tall, massive as a mountain.

"Iron Robert like dark. Sit in dark and think of old battles, old days." He took a step and the deck boomed and trembled under Roan's feet. "You come meet Iron Robert? Okay, you shake hand that can tear leg off bull-devil!" He thrust out a vast, blunt-fingered, grayish-brown paw. Roan looked at it.

"What's matter, Terry, you 'fraid Iron Robeert tear arm off you?"

Roan reached out, put his hand in the stone one before him. It was rough and hard and warm, like rock in the sun, and it made him feel as soft and weak as a jelly-toad. Iron Robert flexed his fingers, and Roan felt the grating slide of the interlocking crystals of the incredible hide.

"You small, pale being," Iron Robert rumbled. "You really Terran?"

Roan tried to stand up straighter, remembering that once Terrans had ruled the Galaxy.

"That's right," he said. He looked up at the rough-hewn face above him and swallowed. "Why do they call you Iron Robert instead of Rock Robert?" He hoped his voice sounded bold.

"You look as though you'd last forever," Roan said. He was thinking suddenly of mountains, and how they weathered and endured, and of his own soft, inadequate flesh and the maybe two hundred years he had left.

"Why not?" the giant said, and he took his hand away and turned and went back to the cast-iron slab that was his bed. Roan's eyes were

accommodating to the dim light now, and he saw a small plaque over the bunk, a carved design of growing flowers. One of the blossoms, half-blown, leaned, dropped a petal that fell with a gritty crunch, crumbling into dust.

"Petals all gone soon," Iron Robert said. "Then last remembrance of home gone. Flower getting old, Iron Robert old, too, Terry. Last long time, maybe, but not forever."

"Well, 'bye Iron Robert," Stellaraire said, and this time when she tugged at Roan's arm, he went with her.

That night Stellaraire made Roan a pallet in a small room near her own. She dressed the scratch on his face again, and the other, deeper one on his thigh, adjusted the blanket under his chin, did something nice to his mouth with hers, then went away and left him alone in the silence and the dark. For a while he thought of the strangeness of it, and suddenly the loneliness was almost choking him, like the bad air in the Soetti Quarter. Then he thought of Stellaraire, and of suddenly having a friend, something he had almost forgotten since Clanth had died so long ago.

Then he slept, and his sleep was tortured with vivid, dying images of Dad. Of Dad's sad corpse, crying for blood.

IX

Roan awoke with a foot digging into his side.

"So here you are," Nugg growled

down at him. "Let me tell you I got better things to do than look all over the ship for you, Terry! Here!" He dropped a box on the floor by Roan.

"Chow's been over for an hour. What do you think this is?"

Roan sat up, rubbed his eyes, feeling the cold, early-morning feeling, even here in a ship in space, far from any sun, with a temperature controlled by machines so that it never varied, year in and year out.

He picked up the box Nugg had tossed to him, got the lid off. Inside were two lumpy-shelled eggs, a slab of coarse, gray bread, a fruit that looked like a small purplefruit; there was also a lump of raw, greenish meat and a red, coagulated pudding that almost turned his stomach in spite of the sudden hollow hunger feeling.

"Thanks, Nugg—" Roan started. But Nugg cut him off with a contemptuous snort.

"If you don't eat you'll be too weak to work. Hurry it up." While Roan ate, Nugg went on grumbling about dangerous freaks, malingerers, and interference with discipline by privileged characters. Roan finished, then pulled on his tunic, feeling the pain as he stretched his wounded flank. It hurt more than a deeper wound might have, and it reminded him of Ithc. The feeling of hatred warmed him. It made his heart thump and his body ache. He hated Ithc worse than he loved Stellaraire.

Love, he thought loudly. That's what love is.

He stood, doing up buttons and thinking of the slender Mule, and how it felt to love a girl who was human, or almost human.

"I'm taking you off scraping. You'll work in Stores. It's only a short hop to Chlora, and there's inventory to take."

Roan buckled on his belt. It made him feel strong, the hard embrace of the belt, and he wondered if this were why there were so many stories of magic belts, like the ones Uncle T'hoy hoy used to tell him.

"If I have to work all the time," he asked as he followed Nugg out into the corridor, "when do I practice my wire-walking act?"

"Practice? What's that?"

"I need to get ready for the show. Gom Bulj said —"

"You're supposed to be a Terry who can walk a wire like a vine-rat; that's why Gom Bulj took you on. You either can or you can't. Practice! Hah!"

Roan followed Nugg through the din of the Freak Quarter, past the bumps, hisses, shouts, the dragging of boxes and the commotion of people doing things in a hurry. He stared at furred and scaled and feathered faces, massive bodies that clumped on short legs, and lean ones that jittered on limbs with too many joints, tiny things that scuttled, and here and there the bald, clumsy-look shape of a Minid or a Chronid, or some other creature with same faint claim to a trace of natural Terran or humanoid blood.

He looked around for Stellaraire

but there were only strangers everywhere, all hurrying and shouting to each other, their faces hot and busy looking. He passed Gom Bulj at the center of a crowd, snapping out orders and smoking two cigars at once. The entrepreneur saw him, waved a nine-fingered hand and called out something Roan couldn't hear.

They went down, down, into smellier and less crowded levels. In a vast, noisy storeroom, Nugg pointed out a skinny, scruffy being like an oversized and wingless gracyl.

"He's foreman of the shift. Do what he tells you. And stay out of trouble." He walked off and left Roan standing alone.

The foreman had been watching from the corner of a moist eye. He stalked over to Roan, looked at him, then gave a shrill cry. The workers who had been crawling over the heaped goods stopped what they were doing and gathered around. Others appeared from aisles. Altogether there were fifteen or twenty of them, no two alike. They all stared at Roan.

"What are you?" the foreman whistled. "Never saw one like you before."

"I'm a Terr'an," Roan said.

Somebody hissed.

The foreman clacked his shoulder blades together and ruffled out a fringe along the sides of his neck. "I'm a Rik-rik and I'm the boss here," he whistled. "Now, you're new. Your job will be to carry out the slop jars. And some

of the boys don't have sphincters; you'll take care of the diapers. And o' course, some of the gang are messy eaters, regurgers, you know. *That* has to be cleaned up. And —"

"No," Roan said.

The circle around him moved in closer. Something plucked at Roan's tunic from behind.

"I'm boss here, Terry," Rik-rik shrilled. "You'll do what I tell you, right, fellas?"

The tug came again, and Roan whirled, grabbed at a snaky tentacle that was wiping something slimy on him. The being who owned the member yanked angrily, but Roan hauled it close, then suddenly shoved it back. It fell. The others made excited noises. Roan faced Rik-rik.

"I didn't ask to be here," he said, "but I'm here anyway. I'll work, but I won't carry slop. Your men can clean up their own messes."

"You're the newest one," Rik-rik squeaked. "You're *supposed* to carry the slop! The newest one always does."

"Not me," Roan said. "Leave me alone and I'll work as hard as anybody. But don't you think you can pick on me." He looked at the being who was shifting from one of its eight or nine feet to another and snorting softly through its trunk-like tentacle. "And if you ever touch me again, I'll tie a knot in that arm of yours."

"Spoilsport," someone grumbled.

Rik-rik stared at Roan angrily. "You're a trouble-maker, I can see that. Probably you'll want off

three or four hours in a cycle to hibernate; most of you would-be Terries do."

"I sleep eight hours a day," Roan said, "in a bed."

"And you'll want food every day, too. —"

"Three times a day."

"Maybe it'd like to join our sex circle," a bulbous being suggested. "We have a vacancy in—"

"No, thanks," Roan said. "We Terries prefer our own kind for that."

"Chauvinist," a gluey voice said.

"Hah," someone else commented.

"Thinks he's something special I guess."

"All right," Rik-rik said sharply, taking charge again. "Back to work, all of you. And as for you —" he gave Roan a threatening look — "I'll have my eye on you."

"That's all right," Roan said. "As long as you keep your hands off."

For the next eight days Roan worked sixteen hours at a stretch among the stacks of supplies, lifting heavier weights than he had ever lifted before, climbing long, wobbly ladders, counting, tallying, arranging boxes and cans and jars in even rows which the issue clerks promptly disarranged.

When he left the storeroom to go to the mess hall or to his room, he looked for Stellaraire along the corridors and in the rooms he passed, but he never saw her. She's forgotten all about me, he thought miserably. She fixed up my cuts like you'd try to help a scratched

gracyl who was lying on the ground expecting to die. Now she was busy with other things — and other people.

On the ninth day Nugg came to the warehouse, signaled to Roan.

"We're coming into Chlora; planet-fall in a few minutes. Plenty to do: tents to set up, midway to lay out, rigging to stretch . . ." Roan followed while Nugg talked in his usual grumbling way.

"I need to know more about what I'm supposed to do, if I'm going to put on a wire-walking act tomorrow," Roan interrupted.

"Tonight," Nugg corrected. "What do you need to know? Does a Flather need someone to tell it how to fly? You're a Terry wire-walker. So walk the wire."

There was a sharp change in the ship's gravitation, and Roan caught at a hand rail to keep from falling. His feet were like lead, suddenly, and his breakfast was heavy in his stomach.

"What's the matter?" Nugg called. "Never felt high-G before?"

"No-no," Roan said. He swallowed hard, twice.

"You'll get used to it," Nugg said carelessly.

The gravity pulled and the deck trembled and vibrated. There were noises and sudden tiltings underfoot. A roaring whistle started up, went on and on. There was a final, violent shudder, and the ship was abruptly still. The gravity was worse now, if anything.

"We're down," Nugg said. He stopped at a door, unlocked it with a big electrokey, motioned Roan into

a dingy storeroom. He hauled a heavy wooden mallet and a vast bundle of plastic stakes from a shelf, shoved them at Roan.

"Go ashore and help stake-out. There'll be Mag to show you what to do. I heard about the trouble between you and Ithc. I got no time for any of that. You do your job and stay out of his way, see? When you finish, go to tent three, cell one-o-three, and get ready for your stunt." He walked off, and Roan shouldered his load and went looking for the debarkation deck.

A stream of circus creatures were pushing into an elevator, and carrying a box or piece of equipment. Roan, caught in the press, went into the elevator with them, and along the long central corridor of the ship and down the ramp, out into the strange smell of another world.

He started sweating almost immediately. The heaviness felt worse outside, in the heat, and Roan didn't like not knowing where he was supposed to go and having only a vague idea of what to do.

He was walking across a landing field. Not an official, well-groomed one, but more like an abandoned launching pad; just a flat, cracked concrete ramp. Beyond, a garbage-dump of a neighborhood crawled up a hillside. It reminded Roan depressingly of home.

Beyond the garbage-dump neighborhood reared a blue metal city, flashing harshly in the merciless sunshine. A flat, shining sky loomed overhead.

The crowd from the circus ship thinned out everyone hurrying to an appointed task.

Miraculously, the incredible, monstrous tents began to go up. Roan walked toward them. A diminutive red-eyed creature scurried up to him, pulling a heavy cart that bumped over the cracks in the concrete. It stopped in front of Roan and jumped up and down, chattering, waving a stick overhead. "Mag! Mag!" Its voice was like fingernails on dry wood.

"I guess you're Mag," Roan said. "Where do I go?"

Mag started off with the cart again and Roan followed him across the field where the garbage was being cleared off as the tents went up.

Mag pointed with his stick to a spot marked with powdered chalk and Roan pounded the first stake in. The hammer felt like a tree trunk and he brought his whole body down with it when he struck.

After the first stake, he wanted to throw the mallet down and sit on the ground and catch his breath, but Mag chattered and waved his stick and danced toward the next chalk mark, and Roan followed. There were other stake-drivers at work, big, thick-armed humanoids mostly. They swung their mallets with effortless ease, knocking a stake into the hard soil with two or three easy blows and moving on to the next. Roan struggled with the heavy mallet, raising it and letting it fall. Sometimes he missed the stake completely. After each stake, he promised himself he would

rest. But the others never paused, and somehow he didn't want to be the first to stop work. His aim got worse and worse. He broke one stake with a glancing blow, and Mag jumped up and down and his screeching went up into the super-sonic. Roan leaned on his mallet and breathed dust, then started in again.

For hours in the blinding sun, Roan drove stakes. All around, the magic tents rose, cables arcing to their high peaks, pennants breaking out to flutter against the steely sky. Zoo people came and went carrying props, equipment, tools. Processions of ambling animals with caked dung on their flanks went by, driven by cursing menagerie-keepers; a few curious locals wandered along the now dusty paths between the canvas tops, ogling the show people. Once Roan looked up to see Ithc standing twenty yards away, eyeing him, fingering the butt of a nerve gun strapped to his bird-like hip. His injured hand behind him, the tall alien came closer, his gill-flaps working nervously.

"I'll — ll be watching — ing tonight when you walk the high wire — ire," he said. "Maybe — aybe you'll fall — all."

Roan made his face smile. "Some day I'll catch you alone, without a weapon, Ithc," he said, trying not to breathe hard from the stake-pounding. "Then I'll kill you."

Ithc showed a gristly ridge where teeth should have been, and walked away with his queer, gliding walk that reminded Roan of the Veed

and the smell of alien hate and cruelty. Ithc wants revenge, Roan thought, watching him go. But he doesn't really know what wanting means.

X

The stakes were all driven at last, and Mag squeaked and took his cart away, without even looking back.

Roan found tent three, and in Room one-o-three he found two Freaks. Two other Freaks, he thought wryly. One was a transparent post, and it wasn't until it moved that Roan saw it was a creature at all. The other was a thing with a hide like a skinned tree, covered with orange polka dots, and with a double-faced head on one shoulder. Its modesty section was apparently approximately at the left knee, for it was carefully covering it with a little patch of black plastiflex. As far as Roan could tell, all it was covering was an orange polka dot exactly like all the others.

Roan settled for arranging his tunic into a skirt, pulling it around his belt.

A bell rang — they seemed to ring every few minutes. He followed the first creature out into the dust and heat of the midway. The creature ambled stiffly over to a row of cages, got in one and reached a flipper around to close the big, fake lock, which was supposed to indicate that the Freaks were dangerous. It motioned Roan to the next cage.

Roan looked curiously at the

sign on the bars. PRIMITIVE MAN, it said in Panterran, the fifth legend in a long row, all in different scripts. He climbed in and clanged the door shut and sat on a wooden bench. This part of the job was easy enough. It felt good just to sit and rest.

Roan sat in his cage for two hours. The ponderous creatures of Chlora crowded past, pointing and making noises. One Chloran stood in front of Roan's cage for a long time, making sketches and taking notes in a curious script. Once a child prodded him with a long stick. But they didn't seem to find Roan very spectacular. Most of the Freaks were much larger and more colorful.

Roan hardly noticed the Chlorans filing past because he had fallen to musing about himself again. Some day I'll find out, he thought. I have to know who I really am, who my parents were, where my people are — my home.

Home. Somewhere was home for him, and it wasn't Tambool.

I'll take Stellaraire with me and we'll live among our own kind. Surely Stellaraire was near enough human so it wouldn't matter.

Another bell rang. Dusk had fallen, Roan noticed. The days were short on Chlora. The freak exhibit was now empty of spectators, a garish and lonely place under the polyarcs glaring far above.

Roan got stiffly out of his cage. He'd sat too long and his thigh had stiffened a bit again.

Mag was there waiting for him, the little red eyes catching a glitter

from the arc lights. He chattered and hopped on his spidery legs, clutching his stick, and Roan followed him through the huge, billowing tents. It much cooler now that evening had come. Almost cold when the wind blew, ballooning out the tents and flapping against the poles.

Roan walked through the dizzying flickers of colored lights and blasts of noise from the noise-makers and the twirling of weird creatures.

At the base of a vast mast as big around as Roan, Gom Bulj appeared from the crowd, his walking tentacles rippling as he hurried over.

"Ah, there you are, young Terry! You're on! How've you been getting along? Now, I'm expecting great things of you! See that you perform in a style worthy of the Extravaganzoo!"

"What am I supposed to do?" Roan asked. "I don't know anything about being in a 'zoo. Don't I wear a costume?"

"Do? Costume?" Gom Bulj popped his huge eyes at Roan and drummed on his wide torso with his thick fingers. "You're the first Freak I've had who wanted freaking lessons. You have expensive ideas, young Terry!" He plucked a cigar from the flowered waistcoat that stretched across his chest, stuck it in his mouth.

"Later on, we'll see; for the present, you're on probation. Oh, it's a gamble, taking on new talent! Never know how the public will receive 'em." He drew a tremendous

breath that made the cigar burn bright yellow, letting the ash fall with the insouciance of those who never have to clean up after themselves.

"It wasn't my idea for you to kidnap me," Roan said.

"Tush, tush! I'm going to forget you said that, young Terry." Gorn Bulj flung his red-lined cloak about him and rippled his legs. "Good luck—and if you *should* fall, do it nicely, as though it were part of the act." He loosed a vast cloud of smoke from his air-discharge orifice and hurried off.

Mag pointed with his stick to the rungs set in the pole. Roan looked up. He couldn't see it, but somewhere up there, in the backwash of the cacophony of circus sounds and colored lights, there was a tightrope.

Ithc strolled up, tall and alien, his gills moving in and out, his greenish face shadowed sharply black in the harsh light. He was still wearing the nerve gun.

"Go—oh up—upp," he said. "All—ll the way—ay up—up."

"I'll go up," Roan said. You couldn't do it, but *I* can. I'm a Terran." A short life and a glorious one, he thought, looking up the swaying pole. Stellaraire would be down here somewhere; maybe she'd be watching him. He'd have to throw off the tiredness now, and forget the stiffness in his leg. He wanted to do his act smoothly, just as though he'd been with a 'zoo all his life. He wanted her to be proud of him.

He started up the ladder, smiling to himself, thinking how she'd look at him, what she'd say. He thought about her smooth body and he was eager to be finished and go and find her.

He climbed endlessly, heavily. He stopped to rest halfway up. He didn't want to be tired or breathless. It was going to be hard, walking the rope with that gravity pulling at him. And he felt hot and dizzy and his leg ached.

Roan looked down. Ithc was there at the bottom of the ladder, a toy Ithc, far off, looking up. If he shot Roan with the nerve gun, everyone would assume Roan had merely fallen.

Roan climbed, slowly now. He was safer on the high wire. Ithc's gun couldn't reach him that high up. But he felt eyes on him and looked back again. A bright spotlight was on him and so were a million eyes. A voice was booming over the loud-speaker, in Chloran, and Roan knew it was announcing him. He heard the word, "Terran."

There was noise for him, loud and insistent.

He forgot the eyes and the noise and kept climbing. The metal of the ladder was cold, from the wind glowing on it, and slippery.

He reached the platform at the top. A few feet above him the top of the tent billowed and flapped. The noise of drums rose to him, commanding him on, and the spotlight felt like a ray of heat. Everything seemed to spin slowly, and he held onto the flimsy rail for support.

There was nothing to catch him if he fell.

Roan put a foot on the wire and inadvertently looked down. The world fell endlessly at his feet. He pulled his foot back and felt his stomach sweating coldly inside, and the fear reaching to hold his body rigid.

He held onto the bars around the edge of the platform and shook. He was afraid even to stand there on the little platform. I'm a coward, he thought with horror. But he couldn't do anything about it. All he could do was hold on for dear life and wonder how he was going to get down—and know that Ithc was waiting below with the nerve gun in case he tried to back down, hoping he'd fail.

Roan wanted to die—but not by falling. Just to die now, without effort.

"Roan!" a voice called, faint and clear from the middle of the air. Roan looked. Stellaraire was on the platform at the distant, other end of the tightrope. She was dressed in gold skintights now, from head to toe, and she called, "If you don't come here, Terry, I'm going to come there."

Roan held on and looked at her. He remembered how she had shuddered when he told her what his specialty was. But she had climbed up here to the crow's nest to watch him. She had known he might need her.

He let go of the rail. Falling wasn't anything. He would just die—like Dad. But to fail, and have to go on being alive . . .

He went to the taut, black cable, stepped out on it, stood balanced on the wire that swooped down and up again to the blob of light and the golden figure. Then he was laughing aloud, with relief that he wasn't a coward, and with love for his woman, with the deep joy of life.

He walked right across the tightrope, stopping in the middle to wave to the invisible faces below. He was master of the crowd now, tuned to the strong noise of the drums.

Then he was at the other end and Stellaraire caught his hand and pulled him close, looking up at him, and there were tiny flecks of gold dust in her hair.

"Would you have done it?" he asked her afterward, when they were back on the saw-dusted ground among the black shadows from the high, hazy polyarcs.

"I would have tried," she said. "Now it's time for my dances." She squeezed his hand and slipped away in the crowd. As Roan turned to follow, he saw Ithc's yellow eyes watching from the shadow of a ticket booth.

XI

Stellaraire's act was terrific. It was an erotic dance in five cultures, and the Chloran part must have been crude enough for the crowd to understand, because they roared with enjoyment.

But part of the dance was for Roan alone, out of the thousands. He liked it. He liked her being

his woman, when everybody else wanted her.

"Even I," said a bald, purplish Gloon standing by, "even I can find her attractive. She can dance in such a way as to seem a regal bitch of Gloon. She can be anything you want her to be. Anything you pay her to be. A tramp of rare talent."

Roan whirled with his fists clenched, but the Gloon was already moving off, not even noticing Roan.

He watched the dance to the end, not enjoying it now. There had been other men for Stellaraire, he knew that. Even creatures not men. But one other thing he knew: she wasn't any tramp. And there weren't going to be any more men except Roan.

After the dances he watched to see which way she went, but she disappeared through the crowd along one of the aisles.

Half an hour later he was still looking for her, along corridors of smelly canvas and rope, among sagging, faded banners and garish lights and the shouting of hucksters and the blare of noise-makers and the clamor of the crowd that seemed to be everywhere now, flowing among the tents and stalls and poles like a rising flood of dirty water. A grossly fat being in a curly silver wig directed him to Stellaraire's dressing room, after he had asked and been ignored or insulted a dozen times.

But Stellaraire wasn't in her pink, tawdry tent-room. Roan stood there undecided, feeling an uneasy sen-

sation washing up inside of him. He wanted her — the reassurance of her. He recalled that she smelled of young trees.

"Where did she go?" he asked Chela, one of the girls who shared the dressing room. "Did you see her?"

Chela was a tiny, graceful saurian, faintly humanoid, with long, heavily made-up eyes. She flapped her artificial lashes at Roan and showed her little teeth,

"Ithc came and got her. He wanted her for something." She looked demurely at the floor and by some trick of musculature curled her eyelashes back.

"There's always me," she added.

"Wanted her for what?"

"Reely!"

"Where did they go? Did you see?"

"No. But Ithc lodges in Quadrant C." She was putting purple paint on her lip-scales now, bored with Roan's questions.

He made his way through the rings where shows were going on, pushed through the crowds on the other side. Once, he saw Nugg's heavy, ugly face, and heard him call. "Here! Where you think you're going?" But he ignored him, pushed on through the crowd.

There was a taste in his mouth that was part fear and part something else, he didn't know what. The uneasy feeling was like a sick weight inside him.

A clown was shot from a cannon and the smell of gunpowder spread through the tent. Lights went off and on, and colored spots were a

kaleidoscope of dancing patterns. Roan went through a slit in the back of the huge tent into cold night air, crossed a path and went into a smaller one where most of the roustabouts quartered.

"Where's Stellaraire?" he asked of a wrinkled olive-colored being who was sitting on an upturned keg, nursing a vast clay mug with both hands.

The oldster let out a long breath. "Working," he said, and winked.

"Where?"

"In private."

There was a sound — kind of animal moan — from the adjoining room. Roan flapped through two stiff partitions, came into a dim, cluttered room with a mud-colored rug, beaded hangings on the walls, the reek of a strange incense. Ithc stood across the room, the nerve gun awkwardly in his good hand, his gills working convulsively. Stellaraire stood before him, her golden costume torn off one shoulder. One arm seemed to hang limp.

"Dance — ance," Ithc commanded, and aimed the gun at her as though he would shoot.

The double voice issuing from his gills seemed to send a shudder through the girl. There were several circus people ranged along the far wall: an under-director whom Roan recognized, a pair of Ythcan laborers, some minor creatures in second-string clown costume. One with a dope stick blew a cloud of smoke at Stellaraire.

"Come on, dance," he urged carelessly.

Stellaraire took a step back.

"Come — umm here — ere." Ithc said.

She turned to run, and Ithc's finger tightened on the firing stud of the nerve gun.

Stellaraire fell, and Roan heard the animal noises again.

Roan's body hurt with hers, but he held himself rigid, hidden in shadows. This wasn't a time for gestures. Whatever he did now had to count. He stepped softly back, whirled, ran across the tent where the old being hiccupped into his beer, out into the dark. There were tent stakes stacked there, somewhere. They were pointed at one end and knobbed at the other, and heavy. He groped, stumbling among tent ropes, feeling over damp ground, lumpy refuse, hitting things in the dark. His hand fell on a bundle, and he ripped the twine away, caught up a yard-long, wrist-thick bar of dense plastic.

He ran around the tent to the side that opened on the alley, lifted the heavy flap, stepped into the smell of snakes and Ythcan dope-smoke.

A small clown in colored rags was just in front of him. Beyond, Ithc stood, tall, lean, slope-shouldered, long-necked. He was holding his bandaged hand close to his side, and the other with the nerve gun was held awkwardly out.

That was the first danger. Against the gun Roan would have no chance at all. There was no question of fair play; it was simply necessary to save Stellaraire from what was happening to her, in any way pos-

sible. And he would have to do everything right, because he wouldn't have another chance.

He gripped the club carefully, stepped quickly past the ragged clown, set himself, and brought the club down on Ithc's gun-hand.

He had decided on the hand instead of the obvious target, the head, because he wasn't sure were Ithc's brains were; hitting him on the head would not bother him much.

It was surprising how slowly the gun fell. Ithc was still standing, holding his hand out—but now the hand was oozing fluid, and the gun was bouncing off the dusty rug and falling onto a pile of dirty clothing, and Ithc was bringing his hand in and starting to turn. Roan brought the club up again—how heavy it seemed—and aimed a second blow at the back of Ithc's neck. But Ithc was turning and ducked aside. The blow struck him on the shoulder and the club glanced off and jarred from Roan's hands, and then he was facing the tall, pale-green, mad-eyed Ythcan, seeing the dirty yellow of the gill fringes as the flapped, smelling the penetrating chemical odor of Ithc's blood.

"Owww—owww," Ithc moaned, and brought a foot up in a vicious kick, but Roan leaned aside, caught the longtoed member and threw all his strength into twisting it back and around, driving with his feet to topple Ithc. They fell together, Roan on top. Ithc's sinewy body buckled under him, and his knobbed knees battered against Roan's chest. But he held on, twisting the foot, feeling the cartilage crackle and

break, remembering Dad, and the sounds Stellaraire had made, and he twisted harder, harder

Ithc roared a vibrating double rear, fighting now to escape, but Roan reached after him, caught the other foot, tore at it, twisting, tearing, while the now helpless creature fought to crawl away. Then Roan was on Ithc's back, his arm locked around the other's throat, crushing until Ithc collapsed, fell on his face, his legs twitching.

Roan got to his feet. He was only dimly aware of the faces watching, of Stellaraire still moving on the floor beyond her fallen tormentor, of the stink of alien blood and burning dope. He looked around for the club, saw it tangled among unwashed garments on an unkempt heap of bedding by the sagging canvas wall. He caught it up, turned back to Ithc.

The alien lay half on his side, his broken feet grotesquely twisted, his gills gaping convulsively. A deep, reedy vibration of agony came from him. Roan brought the club up, and paused, not hesitating, but picking the best spot—the spot most likely to kill.

The yellow eyes opened. "Hurry—urry," Ithc said.

Roan brought the club down with all his strength, noting with satisfaction that the Ythcan's limbs all jumped at once.

He hit him twice more, just to be sure Ithc would never bother him again. The last blow was like pounding a side of meat hanging in a kitchen. He tossed the club aside,

picked up a dirty blanket and wiped the spattered yellowish blood from his face and hands. He looked around at the circus people who watched. Two of the small clowns were edging forward, looking Ithc over, a little saliva visible at the corners of their beak-like mouths.

"Nobody helped Stellaraire," he said. "Nobody helped me. Anybody on Ithc's side can fight me, if they want to." He glanced toward the club, flexing his hands. He was breathing hard, but he felt good, very good, and he was almost hoping the other Ythcan would step forward, because it had been a wonderful feeling, killing Ithc. He felt as though he could beat anybody, or all of them together.

But no one moved toward him. The one with the dope-stick ground the smoke out on a horny palm, tucked it in a pocket of its black polyon blouse.

"It's your fight. Gom Bulj won't like it; Ithc was a valuable piece of livestock. But who'll tell him?

He may not even notice. Who cares?"

"We'll take care of the remains," the small clowns said, clustering around the body.

The others were leaving, wandering off now because the fun was over. Roan went to Stellaraire and lifted her in his arms. He was surprised at how light she was, how fragile for all her sumptuous curving flesh; and how sharp was his need to take care of her.

She smiled up at him. "He . . . must have gone . . . crazy."

"He won't bother you any more, Stellaraire."

Out in the cold night, the blaze of stars, the rise and fall of the mob-noise, Stellaraire's arm went around his neck. Her face was against his.

"Take me . . . to my tent . . ." she breathed against his throat, and he turned and walked along the shadowy way, aware only of the perfume and the poetry and the wonder of the girl.

TO BE CONTINUED

On the Riverworld every human
being was born again and many
died again . . . over and over!

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Castles In Space

by ALMA HILL

In those days space was adventurous and free—and brave men battled to the death for a fair lady's favor!

In those days no lady was allowed any say about how things were run. The only reason Kafri was in the Throne and Control Room of Star Ship *Sazarac* was that she had been sent for to fetch decanters and chesspieces. But as she had not been told to go, she lingered.

Two kings, Karl of Avlon and Kafri's father, Gurton Redbeard of *Sazarac*, faced each other across a carved and gilded table. Beyond them the viewing wall was atwinkle with multicolor lights, analytical pips of the asteroid swarm they had both come to mine for fuel ores and other supplies. There, also, rode the great globular hull of Ship *Avlon*, ringed with a glittering haze of scoutships. Either ship alone might have done its mining and gone its way. But their coming together was bad luck. Their knights would surely be making trouble for one another unless the kings could work out a protocol.

But they seemed intent only on the chessboard.

Gurton Redbeard slid a bishop to one side. Karl rubbed his chin with the edge of his forefinger. Gurton blew a smoke ring. Karl reached a hand, hesitated, shook his head and sat back.

Kafri leaned forward, holding her breath. She had often sat to this same jewelled game-board against her father, and Karl was developing an attack she liked herself. Should Karl move aright, he'd surely win.

Gurton Redbeard glanced up sideways.

"My daughter would not only fill our pipes and goblets, Sir Guest," he remarked. "She would also advise you how to move."

Kafri stiffened. Her father's tone made her suddenly nervous. Of course she had no proper—

King Karl turned toward her, laughing. "Would you advise me for good or ill, Milady?"

Oh, she ought to be siding with the Home Ship! But in a pinch between honesty and manners, Kafri knew that the only safe course around Redbeard was honesty, and as little as possible of that.

"It—it seems to me, Sir Guest, in b-best of my opinions, that if you should move y-yon rook to queen file—" She caught her breath to end the stammering, cast up her eyes and clasped her hands.

"Ho!" King Karl tilted his head this way and that way, twirling a blond curl of mustache. "Ha. Hmmm. Phm. Milady, you are as wise as you are beautiful, which is to say, excessively so. I'll do it!"

And he did.

Kafri clapped both hands to her cheeks. Great Space! With that rook file open, she saw—now she saw—oh, her wily old father had hung his guest over a barrel. By the twitching of his flaming whiskers, he let her see that he had planned it all accordingly.

But he sat back, shaking his head slowly.

"The two of ye are too many for one old man. I concede!"

King Karl blinked. Thereupon Kafri realized that he, too, had seen it beforehand. Were they, then, both making sport of her?

Feeling much like a kitten between lion and tiger, Kafri dropped her head in confusion, then flushed a curtsy to take up the head motion; then backed toward the door to account for the curtsy.

Both men burst out laughing. Kafri swirled about, routed and fleeing.

Gurton Redbeard spoke softly, "Wait."

Kafri knew that tone. She froze, then turned back carefully, not too fast.

Gurton's next words, however, were entirely benevolent.

"It pleases me, daughter, that you favor our guest, for we have been talking of a marriage between our two ships, and King Karl has a son as like him as mirror and mirror. If you will well to wed, then there will be a festal peace between our realms, and kinsman's alliance. A fine thing that, eh?"

Wed?

"Perchance it is a new thought, Milady," King Karl spoke more gently, as befitted a guest, a diplomat, and a negotiator. "Yet we hope that you will think well of it. We are a great Ship and an honorable clan. How say you, then? Will you wed my son and join our Clans?"

Now Kafri was feeling wronged in her dignity, having been laughed at; if deservedly, so much the worse. Besides, it hurt her affections to be thus parcelled off and sent from home. And furthermore, it hurt her sense of honesty to be consulted about it, for if Gurton Redbeard decreed that she should do thus and so, what else could she do? She was therefore wroth with both of them, but mostly with her father, and this put her fully into a mood to leave home.

"Aye," she replied, firmly, "that will I, then."

So curtsying again, she swished her hoopskirts out the door, and this time they let her go.

It was a well-educated retreat, but without victory. Her nose hurt. Her eyes stung. She feared a fit of tears and needed to get into Ladies' Country with it.

But as she was halfway out the Throne Room door, she saw two ladies far down the corridor: her blonde half-sister and the newest of their mothers. They had a basket of tapestry patterns between them and were holding them against the corridor wall and spreading them along the floor to make choices. Kafri durst not weep before her father; yet as she knew those two, she cared not to do it before them either; so she faltered for a moment in the doorway and half-turned the other way.

Meanwhile, of course, the door had been closing itself, and because of her hesitation, Kafri failed to get the last bit of ruffle clear; it caught in the jamb and stopped her against the closed door. There she was tethered, with the door still open a hairsbreadth because of the pinch of stuff; and she became aware that she was hearing matters she should not.

"—those mines," said Redbeard. "We can map out shares—"

"Softly, neighbor, softly." Karl chuckled. "First the wedding, for there have already been affrays. Until we set a new note we can plan nothing further."

"Oh surely. And look you, I'll be gladly rid of this lass, for such a beauty is a problem and a worry continual. Every High Day more trouble, for as my officers get glimpse of her, up starts the poetry

and the challenges, with half my officers ready to kill the other half, instead of, ha, hum, ah—and let me be frank with you, neighbor, you had best take thought about the same trouble in your own Ship."

"Pho, my lad will soon have her bloat enow, and so an end to poetry."

There was a familiar scratching sound; Redbeard was ruffing either his chin or his head hair. "Well enow, then. But that is then, whereas now is now, and if my knights learn of my daughter being wed off-ship, why they are a mettlesome lot and may take out some wrath, you see."

There was a pause, Kafri tried, very cautiously, to pull her petticoat free. But the silken threads were strong and the fold of lace secure.

"You really think it might cause trouble to—hm. Ha.Phm."

"Verily, if our knights and scouts were to see our daughter given off Ship, too many of them would be ill to control. And then you knights and scouts—well, I'd liefer fare forth to dig tool diamonds in bare sark."

Chairs creaked.

"Hm. Aye. Well, then, some private arrangement."

"Just what I had in mind. Now supposing you return to your Ship, declaring that you will send young Karl back with papers and the like. Who will think anything of a spring-ald upon an errand? Then we can—"

"That, nay, neighbor. Young Karl stays where he is."

"Very well, you can pass for him yourself. Another uniform, another

man, as the saying goes, and it is well known that you look full alike. Either may pass for other, and the main thing is that no great matter will seem to be afoot. And, as General Loki pilots your son's barge, who will pick a quarrel without a great need for one? Eh? Safe enough so far?"

"Are you saying that we should spirit the lass away with but two men in a barge?"

"Aye, why not? Who'd think to find a lady in such a place until we say she's gone?"

"Nay, nay! There'll be discredit to my son and more ill-will than good come of it."

"Tut, we can shift past that also. Stay you here, seeming open and innocent, and let Loki carry both lass and blame; is he not a clanless man?"

"That might—but still."

"Oh, keep you General too. The ceremony will clear all. And when it appears that all is better than expected, then all will rejoice and what's more, get to work."

Gurton laughed uproariously, and after a moment, Karl joined in.

Under cover of this noise, Kafri tugged frantically, tore her skirt free and ran for her life, brushing the pattern basket with her billowing skirts and scattering the patterns, to cries of indignation from both the other ladies. These she never stayed to answer.

"Were she not her father's pet," muttered Tenth Mother, snatching for pattern papers that drifted, curling, in the afterdraft, "I'd pet her handsomely!"

But Kafri escaped to her room, drew her skirts well in and closed the door tight, letting tears well up and flow as she peeled off her torn dress and everything else, leaving petticoats in ruffled rings across the floor, and dove into her coffin.

There, with the bed foam snug around her, she wept her utmost. It was all the bosom she had to bawl on, for her own and First Mother was long dead, and Redbeard had never taken another official wife, but only these fancy dancy concubines, long on court etiquette, full of graces and wiles, but short on kindness.

Yet if she must hide her feelings, she had them and strongly too. Weeping eased her but little; so she turned the coffin to cleanse and massage, and still she could not rest.

Flinging the coffin lid open again, she jumped out and kicked her clothes into a heap. Then she tossed everything into the launder, including the torn one. Best not have that seen again for awhile. She dressed hurriedly.

What had they said—tonight? She might be sent for at any time. A High Day dress, she'd best. But feeling more and more uneasiness, a sense of haste, she got out the first she found, a silvertissue, new, with petticoats looped to show pink underskirts like petals.

She studied the effect in the mirrored floor and walls of her room. Neat enough from every angle of view. But beauty?

Were the two kings merely dicker-ing, or was she? Straight black hair that other ladies sniffed over; yet

it framed her face well, didn't it? She had large eyes of a good strong blue, and other features that she was used to and had been taking for granted. What would the strangers of Ship *Avlon* think of her? Could she compete with concubines—for well she knew that all royalty had concubines—that was the hard question. She could only hope so and do her best. Strangeness opened out on all sides until the very mirror-images of herself seemed strange, a host of strange ladies in rose and silver, with black hair and blue eyes.

Still no summons from Redbeard.

But why stand here fidgeting? He could find anyone, anywhere on Ship. She was minded to take a last look at the old places of the only home she had ever known—now that she was being pushed out of it like a chess piece across a game board.

She stepped out of her bright room, into the dim corridors. It was by now very late, but even so it was very dim. The Ship might have to limp on half power to some other source of supply—how could she grudge her own duties to her own Ship? Kafri shook her head at herself, but still she felt full lorn.

Lights were full, however, in the Nobles' Nursery. Currently it held only General Bors' twins, the young Arams' newborn, and her own Least Brother—all dear little people, and she must not even say good-by. But at least she could peep in.

Least Brother, she found as soon as she opened the door, was sounding off at a princely rate. The room was vibrant with sound. The night

nurse was in a predicament, feeding the Bors twins; she had both hands full; and though by protocol Least Brother came first, there'd be double noise if she put the twins down.

Kafri solved this handily by scooping Least Brother out of his bunk, and squeezing the howl out of him. She was glad to meet one simple common problem, and moreover Least Brother was so very dear. He gave a long informative belch, drew in a breath and discovered with surprise that nothing hurt any more. He let out the breath in a sigh of solid comfort, rolled his head over against her neck and relaxed, going heavy, asleep then and there.

Still Kafri held him awhile before putting him down. Least Brother was such a good size to cuddle. His demands were so few, so honest, and if sometimes loud at least always understandable. Would she have children of her own? Most ladies did, but some never. Life made its own terms.

When she put Least Brother back into his bunk, he ignored her, relaxed as he was in sleep and perfect trust. Just so; and should she panic either? She felt a little better, but her thoughts were still ill-sorted.

When she stepped into the corridor again, she found a scrap of luck—a bit of lace blowing in the night drafts that whispered in the dim corridors. Then it hadn't been noticed! Feeling fortunate, she caught it up for a souvenir—and to keep it from being found by someone else who might get to thinking and maybe talking and maybe annoy Redbeard—and all precautions

against annoying Redbeard were lucky moves.

It was now full darktime, when nobody used the corridors except a few watchmen. She turned towards Weavers' Country, avoided a passing sentry, tiptoed the other way and came to Farm Country, where there was always some light, but also many green and scented shadows.

Here, among the bean vines, she heard sounds of sobbing, and found Ninth Mother in a dark mood. These ladies outranked Kafri and rather liked to keep her aware of it. To find one of them thus upset was an odd event in a day full of odd events. The upshot of their conversation was that the ladies exchanged fashion advice and then swapped dresses, trading the bright new gown for Ninth Mother's black lace. This turned out lucky later on, when another sentry might have seen Kafri and asked embarrassing questions; but she looked so like a shadow that he never noticed her.

In this way, wishing hard that she did not have to leave this home she knew so well, Kafri came to a door she had never seen before. But then she had never come so far into Farm Country except by open paths. This door stood close behind a high bank of flowering tomato vines. The paint on its threshold looked dry and clean, as if the door were little used. That might be, for it was plainly marked:

**AUTHORIZED PERSONNEL
ONLY**

The thing is, that when a girl feels uneasy enough, authorizations mean less. Here in her own home was a place that she had never known of, and this was her last chance to see what lay beyond that door.

First she hid her slippers under a tangle of leaves. Next she stepped quietly up to the door and pushed it very carefully. It went back easily, without a sound.

Nothing but a stairwell—a narrow stairwell, leading down into darkness from the light of Farm Country that came past her own downward-pointing shadow.

Somewhere down there was a sound of—what?

Holding her hoops so as not to rustle, she snookied gently across the landing, down the steps, shoulder to wall, turning angles, careful, careful, into the deep darkness.

The sounds grew louder. Machinery. Space, what a rumpus! Coarse footing too, and she had left her slippers. Still, bare toes were better for feeling her way down, down.

Now dim light again, louder racket of machinery. A loading platform perhaps—a wide shelf with bays at the side, and heaps of boxes here and there. Then turning a corner, the shelf stood flat and open to a wide doorless arch, sharp-edged light, open distance, huge. Were there far walls? Too far to be sure.

Why, this must be the loading docks for all Ship *Sazarac*! No place for ladies, so of course she had never seen it.

What a place! Fascinated, Kafri slid behind a stack of boxes and peered beyond. This was better than

High Days. They should let ladies in once in awhile, if only to see the shows!

Noise, color, motion, so many things going on. Nearest, the two-pilot fighting scouts, the ship's striking force in space—rows and rows of racks. Beyond were several freighters. Beyond those, jumbling distance.

But she saw no people.

Where were the Knights, Techs and Mechs? Robot-trucks rolled about and accounted for the clangor, and machinery was in motion as far as she could see; but not one attendant nor even one guard. How much power these things must use!

Nearest the arch was a vacant space with a row of open blister-ports. As Kafri watched—how long? five minutes or an hour—one of the blisters closed, rolled and peeled open again, revealing a large handsome scoutship marked with the royal comets and the golden harp of Clan Avlon. Ah, that must be that barge that Kafri had heard spoken of; her father's plans must be well forward. Strictly speaking, she ought to be now in her own room awaiting—why, people must be seeking her now!

This was indeed embarrassing. But just as Kafri turned to go back as she had come, she saw movement in that direction also, and dropped further behind the boxes instead, glad of the roughness of the heap and its nook of concealment.

The movement was caused by the swinging beams of flashlights.

As they rounded the corner, how-

ever, one light after another was snapped off. Kafri glimpsed a number of officers, led it seemed by Redbeard himself. They strode to the landing that contained the Avlon barge; They tapped a signal on the hull.

The lock dilated and King Karl stepped out. He had shaved off his whiskers and wore the simple uniform of a fighter pilot with just the royal shoulder-badge; but Kafri knew him because she expected all this. Still it was strange to see it all happening. Until now, she realized, this whole odd plan had sounded like all-talk. Nothing more, really. Was that part of why she had been so much adrift in her feelings about it?

Now at this point she had a good chance to scoot for the back stairs and turn up in some reasonable place looking innocent. But she stayed. Partly she was too nervous to move, and partly, too curious.

Was there anyone else in that barge? General Loki? She'd heard about him lots of times, court gossip was full of stories about what he had done and might do next. There, he stepped out, stooping to pass the lock: a huge dark man. The officers shook hands all around. Then Loki swung back inside the lock, while the others turned and came straight back, snapping on lights as they came.

Kafri held still, still.

Nobody seemed to see her. Why should they expect anyone in such a spot at such an hour? Perhaps they could not have seen her in any case; the brighter the light, the deep-

er the shadow. But how strange it was that Gurton Redbeard, who left no detail to chance, wasn't having her paged over every speaker in the Ship—

Just beyond Kafri's heap of boxes another switch clicked, but no light came on.

"Blast these dim places and hard times," roared Redbeard, genially, "General Bors, will you oblige us with your flash?"

Still bellowing hospitalities and encouragements, right there he took from Bor's hand not a light but something that glimmered like a proffered blaster. It was a blaster. It flared momentarily and Karl sagged instantly.

"Flash doesn't work either, eh?" Shouted Redbeard without a break. "Nothing for it but to shuffle our way to a light that will go on for us." Then, in a lower tone, "Bors, go you back and tell Loki his royal master wants him. Then get rid of him as you like. We'll be creating such a towse about sudden illness and royal cremation and clan rituals that Avlon will be all amort and none will think of Loki. But Loki thinks for himself, so make sure of him."

Bors ran back, while the others tramped off, around the corner and gone. One was dragging, but in the huddle and darkness even with what Kafri now knew, she could hardly be sure. Cremation? That great hearty confident man, dead?

Why, her father had planned it that way! No wonder he hadn't cared where she was! She had only been a bit of bait in a trap for two great

men—and there went Bors to take the other.

Grand Champion Loki, however, was not so quick to outsmart himself and step into a dark place among strangers. He came out again and stood listening; but whatever Bors said, Loki merely shook his head without speaking, with each hand on a butt of his two belt blasters.

Kafri felt a great horror of all that had happened. "That's right, Loki," she whispered. But it was only a small whisper. "Don't trust him, or you're done, too."

Presently Bors came back, shaking his head. But he could get other men, or for that matter get guns and blaze down this tunnel.

The Alarm for General Assembly began to sound through the walls. The robotrucks halted where they were. Then in the silence, the royal dirge music began, beautiful and terrible.

Loki's head jerked at the sound, but then he stiffened. Oh, that was a mistake, a mistake! It wasn't a time to be brave, it was a time to run! There was evil all around!

It came to Kafri that she had hated her father for a long time—for his wickedness, for his violence, for his treachery. She had seen it all many times, and had never thought to question it. Redbeard was Redbeard, the Head of the Clan. But now she had to think about it. Hatred for all this evil opened in her heart like a black flower.

And for that moment there was no one there but that one lone man. Oh, if somebody should warn him!

But who was there to do that except—

Before she could change her mind, Kafri ran down the tunnel and burst into the light.

"They've killed him!" she cried. "Killed him by treachery! I saw it!" She pushed with both hands at the startled knight. "There's naught you can do here! In, man, in! Close lock and get away if you can!"

Loki said a word no lady should hear or recognize. He grabbed her arm and flung her into the barge before she knew what next. He jumped for the controls and punched this, slapped that—the airlock hummed shut, *spunggg*, even as the ship rolled. Kafri was tossed about until she slid into a corner and was cramped there by the forces of a fast departure.

Loki, seemed to ride these maneuvers as easily as a boy on a fun slide.

However, he was no boy. Actually, she had never seen so big a man. He was wearing the green uniform of Ship *Avlon* with general's pips, but no clan device. He was as dark as Kafri, and she saw that he was blue-eyed also, but of a masculine hardness. He turned a dial with some care, and then spoke, not in a diplomat's light tones, but a heavy male bass.

"*Avlon? Avlon?* O.S. Come in, Ship *Avlon*. Barge calling; O.S." He flicked a toggle. "Its too weak a signal," he growled. "However! That'll send until we come into range and then all *Avlon*'ll swarm out like bees and give yon hive something to think on."

He slid a lever and the ship's gain loosened a little. Kafri found that she could straighten out, and needed to.

Loki reached a hand, pulled her up standing, and looked her over. He grinned broadly.

"Art a slut to betray your own ship. But a handsomer slut saw—I—never."

Kafri nodded; his point was fairly taken.

"Aye, sir, you speak truth about betrayals. But consider what my father has done, and under truce too. It's honesty to uphold that? And consider you sir, that I promised to wed young Karl. So it's to betray this one or that one, but at least I betray not my own promise or the Laws of the Clans, do I?"

He stared, then began to laugh. "You're Kafri of Sazarac? The Dark Rose herself? By space, I might've —"

Considering that the outposts of Sazarac were scarcely passed, Loki was rather too much relaxed; yet Kafri felt a little better too.

"And if Karl is honorable—he is, isn't he?"

"As the starts are true. And I should know, for we've ridden copilot on many a mission," Loki said, sobering. He glanced at a viewport, turned quickly and slapped the controls again. Kafri saw him in time to catch at a brace as the boat surged forward or she'd have been thrown again.

"It seems your Clan is out, Milady."

The view port above the panels lighted. Her home Ship—farewell,

Sazarac — filled most of the space; but there was a snippet of black at the lower curve. Against this there showed a swarm of golden needles: scoutships pouring out on their track. But they had a fast ship and a head-start, so surely this was no more than a gesture?

"You'll have to strip and lock into the co-pilot's coffin, *Milady*. We may gain something by dodging."

"Dodge?"

"Aye! and hurry! For at this speed, you'd be dashed to spatters even if we're not shot to powder!"

"Shot?" She blinked. "Do you suppose my cousins would shoot at a scoutship with a lady in it?"

"Oh, blast and jetwash all fool girls, d'y'think this is all in High Council Hall where all shall be known? Strip!" he blurted, flipping her around, expertly unshucking all her petticoats and tossing them over her head. "This is politics, y'brainless poppet!" A button caught as she floundered among ruffles, but he snapped it off, pulled the whole thing loose, bodice and all, tossed the mass into a side locker and kicked that shut with a sweep of one boot. Meanwhile he was saying, "D'y'e'think we have time to stand wondering what they'll do, when it's as plain as—"

He caught her under the ribs with one hand and assisted — that is, tossed—her into the co-pilots coffin, face down. "D'y'think we design control couches to fit ladies' hoops?"

Kafri found that she could see the control panel and could move her hands, which were close by it.

"AND DON'T TOUCH THOSE

CONTROLS!" His deep voice echoed her very thought and the boom of the coffin-lid. A moment later the same voice came through the panel speaker. "Look through the viewpoint."

She was doing that. Great *Sazarac* seemed to be swinging upward; the blackness below increased proportionately, filled with the dancing swarm of pursuit

"Now, *Milady*, d'y'see those three nearest?"

"Nearest?"

"Aye!" Several bad words. "Largest, then." Everything in the picture yawed and swung. A central dimness grew, barred with an X of something like light. "There. Can y'read the insignia?"

They were tiny but discriminable.

"General Bors, that's the largest. I mean, nearest. Doest rampant on a field checky. The two dragons entwined — General Ysem. Comets and luces argent, bend sinister — my cousin, Prince Aram. As I thought. Fastest ships in this part of space. Now I'll let them know you're aboard." Light increased in the control panels, and she blinked. "They can all see your face and they can hear what I'm saying now, as well as you can see their ships. Hear me, you cowards? Any one of you sorry to see *Loki* running like a bat, with only a girl for a gunner?"

The leading ship flashed a rod of flame, reaching, reaching — and the ship rolled and lurched. The viewpoint filled with white fire. Something hissed on the hull.

The foam around Kafri seemed to loosen as the ship flipped and dived — that must've been a near miss, or they'd not be here knowing about it, she knew very well. The viewport was full of swirls, nothing that she could distinguish, everything was erratic. Loki was swearing a torrent — beautiful deep voice, horrible black words. Kafri gathered the sense of his remarks: that they were being overhauled three to one, and that their pursuers were shooting full power. Loki said a good deal more than that, but much was in words she had never heard and couldn't interpret.

She listened and looked, helpless. Any moment now, death? Would she feel it? How would it feel?

Loki stopped swearing. The picture steadied, let the swarm of pursuit come into view. Most of the specks were smaller, some very tiny, and Ship *Sazarac* had shrunk to a ball with black space all around it. But three — yes. They were bigger.

The center of the picture thinned and made the X again; much larger than before — Bors, Ysem, Aram, as if on murder bent, all glowing with charges ready.

On Ysem, a spark swelled, but before it could do more, the ship lurched, the picture reeled. Intolerable light flared and vanished at one side of the rear-view port.

Loki gave a sort of half cough. "Milady! D'y'see that red stud under your right hand?"

It was the biggest thing on the panel. "You mean this thing marked 'Salute'?"

"Salute guns and a girl," Loki expressed a few more sentiments, then gave that half cough again. "That same. Now, if we come about and go *inside* their range, d'y'think y'could push that button *just* when I say and *only* when I say? My hands are both — Whoops! NOW!"

Kafri jabbed at the button, hard, with fist behind thumb.

There was a crackling and spitting, a backthrust, and light that struck through her closed eyelids. When she looked again, the viewport was full of stars again, and three ships rocking into view — no, two ships and a ball of light that grew and grew.

"See the range finder? That scope with the cross hairs? When it centers on — NOW! And HOOOLD it!"

Kafri shut her eyes as she punched the stud, for now she knew what it did. But she punched it, hard as ever.

Again the boat spun, and a great surge drove it. Her ears rang, her thumb slipped off the stud. She looked again, saw the swirling stars, saw a pursuit ship fire at them and miss clean. Then the other ship was zigging around in the range finder; and as it caught in the crux, Kafri punched the red stud again without being told.

Logi gave a great shout. The ship steadied and flew weightless in a straightforward rush. Kafri opened her eyes.

Bors, Ysem, Aram, her kinsmen. Three clouds of sparks with cores of fire, growing from the center,

dimming at the edges. Aram, Ysem, Bors.

The lid of the control coffin swung open. Kafri looked over her shoulder and there stood Loki, laughing like a madman.

"Ah, ha — ha, ha — that was impossible — ah, ha — but we did it! Girl, y'learn fast! Come out of that and kiss me!"

She could hardly move. She understood that they were lucky to be alive, but all she felt was a shuddering horror at the world and everything in it, a cold place full of enormous grief. She came to her knees, tears dripping unstayed.

"Please, I want my clothes," she babbled. "Please — my dress."

Loki kicked the locker open and flung the mass of garments at her. He turned his back and stared out the viewport while she fumbled her way through the tangle, and worked her appearance back to decency. Then, having done what she hoped was enough, she sat huddled, thinking on blackness.

Loki gave that half cough. "Can I look around?"

"You looked before."

"I apologize."

"Don't be angry."

"WHAT FOR!"

"Well, you *are* yelling."

"OH, for — all right."

"Then, you're not angry?" She was sorry for him too. None of it was his fault in any way. She went and put her hand on his arm. He jerked it away as if burnt.

"Don't touch me, Milady. I'll be all right in a minute or so, but just don't touch me now."

She drew back carefully and sat on the edge of the control coffin. It was hard and too narrow. She got up, found the lever and closed the lid gently. Then she stood and watched Loki, while he watched the viewport.

He had turned it away from Ship Sazarac; but Ship Avlon, though nearer now, was showing only a crescent at one side, high and to the left. Much nearer were the masses of the asteroid swarm. They swelled and passed, until the ship seemed to be in the midst of them. There was a gentle jolt, and all forward motion seemed to cease. Loki began fiddling with dials at one side of the panel, and a small crackling began.

"Cancel O.S.," he said, slowly. "Report coming. This is Loki; call Karl at once." There was a slight pause. "Good, I thought you'd be there, Karl. Bad news, lad; Sazarac broke truce. Your father's dead, they say, and by treachery, for I was fired upon as I tried to get back with —" The crackling began again. "Truce, aye, and fired upon, aye! D'y'know my voice? D'y'doubt my word?" More crackling. "So now y'know what to expect, y'll know what to do. I've taken cover among asteroids, for I must check hull damage. I said *hull* damage. Great space, man, d'y'think they were spraying tourney spark? Call council and don't wait on me. Over and out."

He turned to Kafri.

"Now, lass, you have three choices. Fair's fair, and I owe you

justice, for had you not interfered I'd now be dead as King Karl—long live King Karl. So say what you want. Imprimis, if you want to be set back among your kindred, snivels and all, risks and all, I'll try if it can be done. And perhaps it can with the right kind of care about arrangement. Now is that what you want?"

Kafri shook her head emphatically, with a quick shiver. Ship *Sazarac* was home no more to her.

"Secondus, we can proceed to *Avlon* as soon as I make sure that all's in order about this boat. Now Karl is an honorable man, so he'll probably keep his father's word and wed you. But I warn you fairly, lass, there's another he promised before, and he's his own master now. You'd not be First Lady."

Kafri smiled a little. "I think that maybe it's harder to be a great lady than a small one, and I should know about that. Did you say there are three choices?"

"Why, you could come with me. I am a clanless man, nothing to keep me here, but I have a stronghold on an unpeopled planet. The winters are long there, but the summers are as lovely as yourself, and fairer lass saw I never."

Could it be that easy? "Wouldn't we be sought for? Could you fight off all—."

He snorted. "Fight off all what? Karl and Gurton will keep one an-

other busy, doubt you not. We'll be supposed lost by wreck among these flying crags, and maybe sought for here, for awhile, as a mote in a dustbin. Karl owes me thanks and friendship. But running a Star Ship takes a man's mind up full. We'd be soon forgotten among so many other things."

That was a strange thought. Yet Kafri was sure of one thing, and that was that between yonder slippery preoccupied folk, and this hard-spoken fast-acting man, she felt a strong personal preference, had been feeling it all along and acting on it.

"I could run with you now, lass, and who'd prevent me? But fair is fair, you shall say for yourself." He added, anxiously, "You understand, lass, it's a far place. There'd be no other ladies, and few diversions."

It sounded fine. Kafri began to feel anxious too. "I can play chess," she proffered. "But I guess maybe not very well."

He looked at her sharply, then grinned, then chuckled. Well, if he thought it funny—she giggled. Then they both burst out laughing.

In this way, Kafri had her own say, in spite of being Redbeard's daughter, or perhaps because of it. But as to who got the asteroids, she never did hear, and never did think it very important.

END



OUR MAN IN FANDOM

by LIN CARTER

*First of a new series. Here's
your chance to learn all about
fandom—what it is—and why!*

You Read That Crazy Buck Rogers Stuff?

HOW did science fiction fandom get started? There are as many different theories as there are fans. I have my own private theory: I think, like Arch Obeler's chicken heart, it just grew. It started back in the old days (often called *The Good Old Days*), something like this. Professor, a little mood music, if you please, whilst we take a trip down Mem'ry Lane . . .

Back when we were in our teens, there were none of the neat dignified little paperbacks we have today. Nossir . . . we had pulp magazines, great sloppy ragged-edged things, printed on an inferior grade of blotting paper—with titles that were a far cry from the simple, intellectual-sounding ones of today like *Galaxy Science Fiction* or *Analog* (which sound like they ought to be titles of M.I.T. alumni magazines, or something equally technological and formidable). Titles in those days were calculated to arouse parental fears, ghastly ones like *Eerie Interstellar*

Thrills or *Stupefying Rocketship Sagas*, and like that. Also parsecs away from the good taste of today's magazines covers, the covers of yore were shrieking blots of raw color, invariably depicting a platinum blonde whose amazing degree of mammalian endowment would have made her a collector's item for any wide-awake medical school. She was generally clothed in a chrome-plated brassiere, a suit of cellophane pajamas and a goldfish-bowl space helmet, and was shown in the multi-tentacled grip of a green cockroach with octopoid limbs, a bewildering assortment of claws, dripping fangs, bat-wings, and enormous blood-shot eyes . . . three of them, at least. In the rear, huffing along variantly to the rescue, came a blond, square-jawed hero with a grim, slightly constipated expression, clutching a blaster composed largely of old radio tubes.

As you can see, it was tough trying to defend such reading matter on grounds of imagination-stretching scientific stimulus. As a matter of

fact, it was hard enough just getting the things in the house. You bought the latest issue of *Gory Galactic Shockers* — trying to ignore the piggy, suspicious eye of the newsdealer who grudgingly accepted your quarter, growling around the chewed cigar-stump in his mouth some comment about “Punk kids, readin’ this trash, oughta be out playin’ ball.” You bore your prize home, covers carefully folded back out of sight; smuggled it surreptitiously into the house, past Pop who would glare up from the racing form and grumble something about “Punk kid, alla time nose inna book, oughta be out playin’ ball”; and, in the seclusion of your room, you would read every precious word . . . yes, even the ads in the back: Ruptured? Throw Away That Smelly Old Truss! and Great Money-Making Home Business — Weave Your Own Ties on Goldblitz’s Patent Hand-Loom!

Now, one thing the old pulp magazines had was a regular letter column. Editors actually encouraged readers to write in their comments (probably for evidence to justify the magazine’s continued existence to a publisher who probably thought such kids oughta be out playin’ ball). For lack of any local companionship with whom to share your opinions of your favorite stories and authors, you would be forced to write letters to these columns yourself. These letters, almost without fail, graded every story and illustration in the issue via a complex numbered scale. Invariably, they deplored the cover art, and requested the next issue have trimmed edges, be expanded

by 75 pages, and feature a cover by Bok or Finlay. Often these letters were witty and downright clever; personalities emerged, frequently more marked and original than those displayed by the professional writers whose fictions the magazine featured. Sometimes you wrote personally to a letterhack whose opinions matched, or violently contrasted, with yours. Or *you* would have letters published, and other letterhacks would write to you. Correspondence sprung up; you made a far wider circle of friends via the mails than you had in P.S. 109.

Sometimes you would discover that four or five other sf readers lived right in the old home town. Informal clubs came into being. Then regional groups and even national organizations. Arch Oboler’s chicken heart was under weigh.

Whaddaya Mean Ya Can’t Mow the
Lawn, Ya Got Blisters from the Mimeo-
graph Crank?

COSGROVE’S Law states that all readers are potential writers, and all writers are would-be editors. This is true of sf. The phenomenon of fan magazine publishing is now attracting serious attention, and fanzines are being collected by more than one college. What a boon to thesis writers of tomorrow, in search for something to research!

Fanzines come in all shapes and sizes. In the Good Old Days, many were hectographed — a cheap form of printing that involved messy trays of highly odorous jelly, and gave you

a pair of pale purple hands for several days. The mimeograph, that noble gift of the American inventor, has proved the most popular form of printing. But actual-no-kidding *printed* fanzines are not altogether unknown, whether handset on the basement press, or commercially done, as in a few rare cases. Well-heeled fans with indulgent parents have from time to time extruded mags first lithographed, then (and now commonly) printed by photooffset.

What does an average fanzine look like? Mimeographed, sometimes most attractively so, on colored paper; about a dozen pages long (although some have been known to run 100 pages, and even more); stapled along the left margin; with a cover drawing done on stencil, or sometimes a litho'ed or offset pen and ink drawing. Contents vary. Usually an editorial explained why this issue is so late. A clutch of articles . . . a short story or two . . . fannish cartoons . . . poems . . . almost always a lengthy letter-column. From time to time, fanzines conduct polls, review books or other fanzines, have contests, etc. You name it: fanzines have printed it.

The fan press, more than just a mildly interesting facet of Americana, has a practical value. Fanzines are a testing-ground for future professionals in science fiction. H. P. Lovecraft used to publish an amateur magazine, and many of his early stories were first published in these journals. Fans have gone on to be-

come well-known writers — Ray Bradbury (who used to edit something called *Futura Fantasia*), Fred Pohl, Algis Budry (his magazine was called *Slantasy*), Wilson "Bob" Tucker (*Le Zombie*), C. M. Kornbluth, Damon Knight Robert Silverberg, Marion Zimmer Bradley (she still edits one) — the list is almost endless.

More than just writers, fans move on in greater numbers to fill the ranks of magazine editors and book or paperback publishers. Marty Greenberg (Gnome Press), Lloyd Arthur Eshbach (Fantasy Press), Ray Palmer (*Amazing Stories*), Donald A. Wollheim (Ace Books), Larry Shaw (Lancer Books), Robert W. Lowndes (*Science Fiction Stories*, Avalon Books, etc.), Terry Carr (also at Ace), Ted Dikty and Mel Korshak (Shasta Press), Forry Ackerman (*Famous Monsters of Filmland*), and reams of others started as members of the Beanie Brigade.

But beyond even this, there are those potential professionals who gain confidence in the fan journals before moving into the ranks of paid members. The late Hannes Bok first appeared in fanzines. Robert Bloch and Isaac Asimov have had almost as many appearances in the fan press as in newsstand publications. The sword-and-sorcery fanzine, *Amra*, was publishing the artwork of Roy G. Krenkel and Frank Frazetta long before the Burroughs Boom carried them to professional paperback covers.

WHAT makes a guy pour out all the time and money and effort that publishing and mailing a fanzine demands? What does he get for it in return? Sure, fanzine editors usually charge a dollar or so for a year's subscription, but hardly ever do they break even, what with paper prices, printing costs, postage, and so on. And it takes a lot of time, stenciling each page, running it off, collating, assembling, stapling, addressing, bundling, mailing. What does the editor get out of it, that makes it worth his time?

That's a hard question to answer. Anyone with the creative itch already knows the answer, but it's a tenuous and elusive thing to pin down on paper with mere words. Joe Fan-ed gets pride of accomplishment. Pride in a job well done. And if what he's produced is of value, he gets a certain prestige. Today, a decade after they went into the limbo that swallows all fanzines eventually, we still have a fond regard for those really good fanzine editors of the past: Charles Burbee whose *Shangri-L'-Affairs* was such a delight, Walt Daugherty of *Chanticleer*, Gus Willmorth and (after him) Roy Squires of *Fantasy Advertiser*, Donald Day of *The Fatscient*, Stan Mullen of *Gorgon*, Ron and Cindy Smith whose *Insidè* was one of the finest fanzines ever, Dick and Pat Lupoff of *Xero*.

Never underestimate the prestigiousness of a fine fanzine. Many the pimply adolescent, ignored by girls, snickered at by football stars,

was, unbeknownst to his classmates, an international celebrity in the science fiction world. And sometimes fanzines have produced more immediate and tangible results: Charles D. Hornig, who published a mag called *The Fantasy Fan*, attracted the eye of Hugo Gernsback, who pulled him out of the fan ranks and lifted him to the lofty post of editor of a genuine science fiction magazine, *Wonder Stories*. This is quite a noteworthy event, considering that Hornig was naught but a 17-year-old fan from Jersey City, N. J.!

Fanzines have other constructive features, beside serving as bootcamps for would-be pros. They seek out and print all kinds of valuable material of permanent worth which no commercial magazine in the field would dream of touching with a ten-foot blue pencil. They serve as natural vehicles for satire — lampoon — parody. They also print the sort of scholarly critiques of important works that could never appear in a professional magazine. For example, parody has given us a series of delightful Gilbert & Sullivan versions of famous SF novels, originally fan-published by author Randall Garrett, who must have despaired of ever selling them anywhere (they were so good, though, that Old-Time Fan Doc Lowndes reprinted some of them in his professional magazine, *Science Fiction Stories*.) And Larry Shaw, later editor of *Infinity*, and currently editing for Lancer Books, had a memorable and witty discussion of Lewis Carroll's nonsense-epic, *The Hunting of the Snark*, in the terms of (of all things!) a murder

mystery, which was printed in Ron Smith's fanzine, *Inside*.

Scholarship has produced such jolly items as an exegesis of *every single goldurn name* in Robert E. Howard's whole 'Conan' series—written by the deft and erudite Mr. L. Sprague de Camp—and serialized in a fanzine called *Amra*.

Some Recent Fanzines: Current & Choice

NOT all fanzines are of permanent value, heaven help us; many if not most are sheerest ephemera. Let's focus on a quick close-up of a couple of recent ones, to give an idea of the range of material, variety of relative value, and like that.

Yandro is a good example of the "general" fanzine. You are likely to find a little of everything there. It won the "Hugo"—an award given annually at the World Science Fiction Convention, to best novel of the year, short story, artist, fan publication, etc. This, Fandom's "Oscar," was handed to *Yandro* at 1965's worldcon, which was held in London. Now, *Yandro* is mimeographed 16 pages of 8½" x 11" yellow paper. It's one of the oldest fanzines around, now in its 150th issue, and thirteenth year of publication. The editors are Buck and Juanita Coulson, Route #3, Hartford City, Ind., 47348. (30c an issue). Like most fanzines, *Yandro* has a small subscription list limited to a couple of hundred fans, but these few are scattered all over the world—a glance at the letter column reveals comments from read-

ers in Sweden, Australia, England, Spain, Alabama, and other foreign countries. This issue, both the articles and reviews, and the letters, contains comments about the Ku Klux Klan, Robert A. Heinlein, *Peter Pan*, the new paperback versions of *The Lord of the Rings*, movies, and so on.

Then there's *Amra*, a horse of a different color, as it were. *Amra* is published for fans of "sword & sorcery," the sort of action fantasy Edgar Rice Burroughs and Robert E. Howard wrote. The latest issue I have seen is Vol. 2 No. 34, published by George Scithers, Box 9120, Chicago, Ill., 60690 (\$2.00 for 8 issues.) *Amra* is smaller than *Yandro*, 6½" x 9", and printed by offset lithography, sometimes in color. This issue runs to 20 pages, which is about par for the course. *Amra* is the darling of a lot of science-fiction authors, who contribute articles, book reviews, verse. L. Sprague de Camp reviews a new book by Harold Lamb, *The Curved Saber*; Frank Herbert tells how his novel, *Dune*, came to be; Katherine MacLean discusses a book on Zen; there are seven gorgeous Roy Krenkel drawings. *Amra* also won a "Hugo"—the year before *Yandro*.

So much for our nostalgicky jaunt down Mem'ry Lane. Next time Our Man In Fandom will look at the wackiest of all fan phenomena—two amateur publishing clubs, one in New York, the other in California—who publish 10 to 25 fanzines *every week!* **END**

IN THE TEMPLE OF MARS

by FRED SABERHAGEN

Illustrated by GAUGHAN

*The ship drove through the
starlanes, carrying a crew
of fanatics to their death!*

I

Something was driving waves of confusion through his mind, so that he knew not who he was, or where. How long ago what was happening had started or what had gone before it he could not guess. Nor could he resist what was happening, or even decide if he wanted to resist.

A chant beat in his ears, growled out by barbaric voices:

On the wall there was painted a forest

In which there lived neither man nor beast

With knotty, gnarled, barren trees, old . . .

And he could see the forest around



him. Whether the trees and the chanting voices were real or not was a question he could not even formulate.

*Through broken branches hideous
to behold*

*There ran a cold and sighing wind
As if a storm would break down
every bough*

*And downward, at the bottom of
a hill*

*Stood the temple of Mars who is
mighty in arms . . .*

And he saw the temple. It was of steel, curved in the dread shape of a berserker's hull, and half-sunken in dark earth. At the entrance, gates of steel sang and shuddered in the cold wind rushing out, rushing out endlessly to rage through the shattered forest. The whole scene was gray, and lighted from above by an auroral flickering.

*The northern lights shone in at the
doors*

*For there was no window on the
walls*

*Through which men might see any
light . . .*

He seemed to pass, with a conqueror's strides, between the claw-like gates, toward the temple door.

*The door was of eternal adamant
Bound lengthways and sideways
with tough iron*

*And to make the temple stronger,
every pillar*

*Was thick as a barrel of iron
bright and shiny.*

The inside of the temple was a kaleidoscope of violence, a frantic abattoir. Hordes of phantasmal men were moved down in scenes of war, women were slaughtered by machines, children crushed and devoured by animals. He, the conqueror, accepted it all, exulted in it all, even as he became aware that his mind, under some outer compulsion, was building it all from the words of the chant.

He could not tell how long it lasted, but the end came abruptly. The pressure on his mind was eased, and the chanting stopped. The relief was such that he fell sprawling onto a soft surface, his eyes closed. Except for his own breathing all was quiet.

A gentle thud made him open his eyes. A short metal sword had been dropped or tossed from somewhere to land near him. He was in a round, softly lighted, familiar room. The circular wall was covered by a continuous mural, depicting a thousand variations on the theme of bloody violence. At one side of the room, behind a low altar, towered the statue of an armed man who was larger than life and more than a man, his bronze face a mask of insensate rage.

All this he had seen before, and he gave it little thought. Except for the sword. He was drawn to the sword like a steel particle to a magnet, for the power of his recent vision was still fresh and irresistible, and it was the power of destruction. He crawled to the sword, noticing dimly that he was dressed like the

statue of the god, in a coat of mail. When he had the sword in his hand the power of it drew him to his feet. He looked round expectantly.

A section of the continuous mural-wall opened into a door, and a figure entered the temple. It was dressed in a neat, plain uniform, and its face was lean and severe. It looked like a man, but it was not a man, for no blood gushed out when the sword hewed in.

Joyfully, thoughtlessly, he hacked the plastic-bodied figure into a dozen pieces. Then he stood swaying over it, drained and weary. The metal pommel of the sword grew suddenly hot in his hand, so that he had to drop it. All this had happened before, again and again.

The painted door opened once more. This time it was a real man who entered, a man dressed in black, who had hypnotic eyes under bushy brows. "Tell me your name," the black-uniform ordered. His voice compelled.

"My name is Jor."

"And mine?"

"You are Katsulos," said Jor dully. "The Esteeler secret police."

"Yes. And where are we?"

"In space, aboard the *Nirvana II*. We are taking the High Lord Nogara's new space-going castle out to him, out to the rim of the galaxy. And when he comes aboard, I am supposed to entertain him by killing someone with a sword. Or another gladiator will entertain him by killing me."

"Normal bitterness," remarked one of Katsulo's men, appearing in the doorway behind him.

"Yes, this one always snaps right back," Katsulos said. "But a good subject. See the brain rhythms?" He showed the other a torn-off piece of a chart from some recording device.

They stood there discussing Jor like a specimen, while he waited and listened. They had taught Jor to behave. They thought they had taught him permanently—but one of these days he was going to show them. He shivered in his mail coat.

"Take him back to his cell," Katsulos ordered at last. "I'll be along in a moment."

Jor looked about him confusedly as he was led out of the temple and down some stairs. His recollection of the treatment he had just undergone was already becoming uncertain; and what he could remember was so unpleasant that he made no effort to retain it. But his sullen determination to strike back stayed with him.

Left alone in the temple, Katsulos kicked the pieces of the plastic dummy into a pile, to be ready for careful salvage. He trod heavily on the malleable face, just in case someone besides his own men should happen to see it.

Then he stood for a moment looking up into the maniacal bronze face of Mars. And Katsulos' eyes, that were cold weapons when he turned them on other men, were now alive.

II

A communicator sounded, in what was going to be the High Lord Nogara's cabin when he took delivery of the ship. Admiral Hemphill,

alone in the cabin, needed a moment to find the proper switch on the huge, unfamiliar desk. "What is it?"

"Sir, our rendezvous with the Solarian courier is completed. We're ready to drive again, unless you have any last minute messages to transmit?"

"Negative. Our new passenger came aboard?"

"Yes, sir. A Solarian, named Mitchell Spain. As we were advised."

"I know Mr. Spain, Captain. Will you ask him to come to this cabin as soon as possible? I'd like to talk to him at once."

"Yes, sir."

"Are those police still snooping around the bridge?"

"Not at the moment, sir."

Hemphill shut off the communicator and leaned back in the throne-like chair from which Felipe Nogara would soon survey his Esteeler empire; but soon the habitually severe expression of Hemphill's lean face deepened and he stood up. The luxury of this cabin did not please him.

On the blouse of Hemphill's neat, plain uniform were seven ribbons of scarlet and black, each representing a battle in which one or more berserker machines had been destroyed. He wore no other decorations except his insignia of rank.

Within a minute the cabin door opened, and a short, muscular, rather ugly man in civilian clothes entered. He smiled at once, and came toward the desk.

"So, it's High Admiral Hemphill now, with your commission from the United Planets. Congratulations. It's a long time since we've met."

"Thank you. Yes, not since the Stone Place." Hemphill's mouth bent upward slightly at the corners, and he moved around the desk to shake hands. "You were a captain of marines then, as I recall."

And they gripped hands, both men thought back to that day of victory against the machines. Neither of them could smile at it now, for the war was going badly again.

"That's nine years ago," said Mitchell Spain. "I'm a foreign correspondent now, for Solar News Service. They want me to go out and interview Nogara."

"I've heard that you've made a reputation as a writer." Hemphill motioned Mitch to a chair. "I'm afraid I have no time myself for literature or other non-essentials."

Mitch sat down, and dug out his pipe. He knew Hemphill well enough to be sure that no slur was intended by the reference to literature. To Hemphill, everything was non-essential except the destruction of berserker machines; and today such a viewpoint was doubtless a good one for a High Admiral.

Mitch got the impression that Hemphill, had serious business to talk about, but was uncertain of how to broach the subject. To fill the pause, Mitch remarked: "I wonder if the High Lord Nogara will be pleased with his new ship." He gestured around the cabin with the stem of his pipe.

Everything was quiet and steady as if rooted on the surface of a planet. There was nothing to suggest that even now the most powerful engines ever built by Earth-descend-

ed men were hurling this ship out toward the rim of the galaxy at many times the speed of light.

Hemphill took the remark as a cue. Leaning slightly forward in his uncomfortable-looking seat, he said: "I'm not concerned about his liking it. What concerns me is how it's going to be used."

Since the Stone Place, Mitch's left hand was mostly scar tissue and prosthetics. He used one plastic finger now to tamp down the glowing coal of his pipe. "You mean Nogara's idea of fun? I caught a glimpse of the gladiatorial arena. I've never met him, but they say he's gone bad, really bad, since Karlsen's death."

"I wasn't talking about Nogara's so-called amusements. What I really mean is that Karlsen may be still alive."

Hemphill's calm, fantastic statement hung in the quiet cabin air. For a moment it seemed to Mitch that he could sense the motion of the C-plus ship as it traversed spaces no man understood, spaces where it seemed time might mean nothing and the dead of all the ages might still be walking.

Mitch shook his head. "Are we talking about the same man? *Johann Karlsen*, Nogara's half-brother?"

"Of course."

"Wait a minute. Two years ago Johann Karlsen went down into a hypermassive sun, with a berserker-controlled ship on his tail. Unless that story's not true?"

"It's perfectly true, except we think now that his launch went into orbit around the hypermass instead

of falling into it. Have you seen the girl who's aboard?"

"I passed a girl, outside your cabin. I thought . . ."

"No, I have no time for that. Her name is Lucinda, single names are the custom on her planet. She's an eyewitness to Karlsen's vanishing."

"Oh. Yes, I remember the story. But what's this about his being in orbit?"

Hemphill stood up and seemed to become more comfortable, as another man would by sitting down. "Ordinarily, the hypsermass and everything near it is invisible, due to the extreme red shift caused by its gravity. But during the last year some scientists have done their best to study it. Their ship didn't compare with this one—" Hemphill turned his head for a moment, as if he could hear the mighty engines—"but they went as close as they dared, carrying new long-wave telescopes. The star itself was still invisible, but they brought back these."

Hemphill picked up an envelope and shook out photographs, which Mitch spread on the desk. Most of them showed patterns of slightly curving parallel lines, dark against a sullen red background.

Hemphill stood behind him. "That's what space looks like near the hypermass. Remember, it has about a billion times the mass of Sol, packed into roughly the same volume. Gravity like that does things we don't yet understand."

"Interesting. What forms these dark lines?"

"Falling dust that's become trapped in lines of gravitic force, like

the lines round a magnet. Or so I'm told."

"And where's Karlsen?"

Hemphill's finger descended on a photo, pointing out a spot of crystal-line roundness, tiny as a raindrop within a magnified line of dust. "We think this is his launch. It's orbiting about a hundred million miles from the center of the hypermass. And the berserker-controlled ship that was chasing him is here, following him in the same dust-line." His finger moved to another photo, to point out a dark-shape. "Now they're both stuck. No ordinary engines can drive a ship down there."

Mitch stared at the photos, hardly seeing them for the old memories that came flooding back. "And you think he's alive."

"He had equipment that would let him freeze himself into suspended animation. Also, time may be running quite slowly for him. He's in a three-hour orbit."

"A three-hour orbit, at a hundred million miles—wait a minute!"

Hemphill almost smiled. "I told you, things we don't understand yet."

Mitch nodded slowly. "He's not a man to give up. No. He'd fight as long as he could, and then invent a way to fight some more."

Hemphill's face had become iron again. "You know how many people have made a god of him since his departure, and what a boost to their morale his return would be. And you knew him. You saw what efforts the berserkers made to kill him. They feared him, in their iron guts, though

I never quite understood why . . . Do you agree, then? If we can save him we must do so at once—without delay."

"Certainly, but how?"

"With this ship. It has the strongest engines ever built—trust Nogara to have seen to that, with his own safety in mind."

Mitch whistled softly. "Strong enough to match orbits with Karlsen and pull him out of there?"

"Yes, mathematically. Supposedly."

"And you mean to make the attempt before this ship is delivered to Nogara."

"That's it. I've been keeping my rescue plan a secret; you know he wanted Karlsen out of the way."

Mitch nodded. He felt a rising excitement. "And if we succeed Nogara may rage, but what can he do? How about the crew, are they willing?"

"I've already sounded out the captain. He's with me. And since I hold my rank from the United Planets I can issue legal orders on any ship." Hemphill began to pace. "The only thing that worries me is this detachment of Nogara's police we have aboard; they're certain to oppose the rescue."

"How many of them are there?"

"A couple of dozen. I don't know why there are so many, but they outnumber the rest of us two to one. Not counting their prisoners, who of course are helpless."

"Prisoners?"

"About forty young men, I understand. Sword fodder for the arena."

Lucinda spent a good deal of her time wandering restless and alone through the corridors of the great ship. Today she happened to be in a passage not far from the central bridge and flag quarters when a door opened close ahead of her and three men came into view. The two who wore black uniforms held a single prisoner, clad in a shirt of chain mail, between them.

When she saw the black uniforms, Lucinda's chin lifted. She waited, standing in their path.

"Go round me, vultures," she said in an icy voice when they came up to her. She did not look at the prisoner; bitter experience had taught her that showing sympathy for Nogara's victims could bring added suffering upon them.

The black uniforms halted in front of her. "I am Katsulos," said the bushy-browed one. "Who are you?"

"Once my planet was Flamland," she said, and from the corner of her eye she saw the prisoner's face turn up. "One day it will be my home again, when it is freed of Nogara's vultures."

The second black uniform opened his mouth to reply, but never got out a word, for just then the prisoner's elbow came smashing back into his belly. Then the prisoner, who till now had stood meek as a lamb, shoved Katsulos off his feet and was out of sight around a bend of corridor before either policemen could recover.

Katsulos bounced quickly to his feet. His gun drawn, he pushed past

Lucinda to the bend of the corridor. Then she saw his shoulders slump.

Her delighted laughter did not seem to sting him in the least.

"There's nowhere he can go," he said. The look in his eyes choked off her laughter in her throat.

Katsulos posted police guards on the bridge and in the engine room, and secured all lifeboats. "The man Jor is desperate, and dangerous," he explained to Hemphill and to Mitchell Spain. "Half of my men are searching for him continuously, but you know how big this ship is. I hope you will stay close to your quarters until he's caught."

A day passed, and Jor was not caught. Mitch took advantage of the police dispersal to investigate the arena—Solar News would be much interested.

He climbed a short stair and emerged squinting in imitation sunlight, under a high-domed ceiling as blue as Earth's sky. He found himself behind the upper row of the approximately two hundred seats that encircled the arena behind a sloping crystalline wall. At the bottom of the glassy bowl, the oval-shaped fighting area was about thirty yards long. It was floored by a substance that looked like sand but was doubtless something more cohesive, that would not fly up in a cloud if the artificial gravity chanced to fail.

In this facility, as slickly modern as a death-ray, the vices of ancient Rome could be enjoyed most efficiently. Every spectator would be able to see every drop of blood. There was only one awkward-looking

feature. Set at equal intervals around the upper rim of the arena, behind the seats, were three buildings, each as large as a small house. Their architecture seemed to Mitch to belong somewhere on Ancient Earth; their purpose was not immediately apparent.

Mitch took out his pocket camera and made a few photographs from where he stood. Then he walked behind the rows of seats to one of the buildings. A door stood open, and he went in. At first he thought he had discovered an entrance to Nogara's private harem; but after a moment he saw that the people in the paintings were not all engaged in sexual embraces. There were men and women and godlike beings, posed in a variety of relationships, in the costumes of Ancient Earth when they wore any costumes at all. As Mitch snapped a few more photos he gradually realized that each of the paintings was meant to depict some aspect of human love.

It was puzzling. He had not expected to find love here, or in any part of Felipe Nogara's chosen environment.

As he left the temple through another door, he passed a lady who was evidently the resident goddess. She was bronze, and the upper part of her beautiful body emerged nude from glittering sea-green waves. He photographed the smiling statue and moved on.

The second building's interior paintings showed scenes of hunting, and of women in childbirth. The goddess of this temple was clothed modestly in bright green and armed

with a bow and quiver. Bronze hounds waited at her feet, eager for the chase.

As he moved on to the last temple, Mitch found his steps quickening slightly. Could something be drawing him there?

Whatever attraction might have existed was annihilated in revulsion as soon as he stepped into the place. If the first building was a temple raised to Love, surely this one honored Hate.

On the painted wall fight opposite the entrance, a sow-like beast thrust its ugly head into a cradle, devouring the screaming child. Beside it, men in togas, faces glowing with hate, stabbed one of their own number to death. All around the walls men and women and children suffered pointlessly and died horribly, without hope. The spirit of destruction was almost palpable within this room. It was like a berserker's—

Mitch took a step back and closed his eyes, bracing his arms against the sides of the entrance. Yes, something more than clever painting and lighting had been set to work here, to honor Hate. It was something physical, that Mitch found not entirely unfamiliar.

Years ago, during a space battle, he had experienced the attack of a berserker's mindbeam, a weapon designed to throw organized thought into confusion. Men had learned how to shield their ships from mindbeams.

Did they now bring the enemy's weapons inside?

Mitch opened his eyes. The beam he felt now was very weak, but it

carried something worse than mere confusion.

Mitch stepped back and forth through the entrance. Outside the walls of the temple, the effect practically disappeared. Inside, it was perceptible, an energy that pricked at the rage centers of the brain. Slowly, slowly, it seemed to be fading, like a residual discharge from a machine that has been turned off. If it was turned off, and he could feel it now, what must this temple be like when the projector was on?

More importantly, why was such a thing here at all, built into these walls? Was it meant only to goad a few gladiators on to livelier deaths? Possibly. Mitch glanced at this temple's towering bronze god, riding his chariot over the world, and shivered. He suspected something worse than the simple brutality of Roman games. Yes, worse.

He remembered seeing an intercom station near the first temple he had entered. He walked back there, and thoughtfully punched out the number of Ship's Records on the intercom keys.

When the automated voice answered, he ordered: "I want some information about the design of this arena, particularly the three structures spaced around the upper rim."

The voice asked him if he wanted diagrams.

"No. At least not yet. Just tell me what you can about the designer's basic purpose."

There was a delay of several seconds. Then the voice said: "The basic designer was a man named

Oliver Mical, since deceased. In his design programming, frequent reference is made to descriptive passages within a literary work by one Geoffrey Chaucer of Ancient Earth. The quote fantastic unquote work is titled *The Knight's Tale*."

The name of Chaucer rang only the faintest of bells for Mitch. But he remembered that Oliver Mical had been one of Nogara's brain-washing experts, and also a classical scholar.

"What kind of psycho-electronic devices are built into these three structures?"

"There is no record aboard of any such installation."

Mitch was sure about the hate-projector in the temple; it might have been built in secretly. It probably had been, if his worst suspicions were true.

He ordered: "Read me some of the relevant passages of this literary work."

"The three temples are those of Mars, Venus and Diana," said the intercom. "A passage relevant to the temple of Mars follows, in original language:

"First on the wal was peynted a forest

In which there dwelleth neither man ne beast

With knotty, knarry, barreyn trees olde

Of stubbes sharp and hideous to biholde."

Mitch could understand only a word here and there, but he was not really listening now. The words "temple of Mars" had been enough to convince him of the worst; for he

had heard that phrase applied to a newly risen secret cult of berserker-worshippers.

"And downward from a hill, under a bente

Ther stood the temple of Mars armipotentē

Wrought of burned steal, of which the entree

Was long and streit, and gastly for to see."

There was a soft sound behind Mitch, and he turned quickly. Katsulos stood there. He was smiling, but his eyes reminded Mitch of Mars' statue.

"Do you understand the ancient language, Spain? No? Then I shall translate." He took up the verse in a chanting voice:

"Then saw I first the dark imagining

Of felony, and all its compassing
The cruel ire, red as any fire

The pickpurse, and also the pale dread

The smiler with the knife under his cloak

The stable burning with the black smoke

The treason of the murdering in the bed

The open war, with all the wounds that bled . . ."

"Who are you, really?" Mitch demanded. He wanted it out in the open. And he wanted to gain time, for Katsulos wore a pistol at his belt. "What is this to you? Some kind of religion?"

"Not *some* religion!" Katsulos shook his head, while his eyes glowed steadily at Mitch. "Not a mythol-

ogy of distant gods, nor a system of pale ethics for dusty philosophers. No!" He took a step closer. "Spain, there is no time now for me to proselytize with craft and subtlety. I say only this—the temple of Mars stands open to you! The new god of all creation will accept your sacrifice and your love."

"You pray to that bronze statue?" Mitch tensed, getting ready.

"No, the Mars of the ancients is not our god!" The fanatic's words poured out faster and louder. "The myth with helmet and sword is our symbol and no more. Our god is new, and real, and worthy. He wields death-beam and missile, and his glory is as the nova sun. He is the descendant of Life and feeds on Life as is his right. And we who give ourselves to any of his units become immortal in him though our flesh perishes at his touch."

"I've heard there were men who prayed to berserkers," said Mitch. "Somehow I never expected to meet one." Faintly in the distance he heard a man shouting, and feet pounding down a corridor. Suddenly he wondered if he or Katsulos was more likely to receive reinforcement.

"Soon we will be everywhere," said Katsulos loudly. "We are here now, and we are seizing this ship. We will take it out to save the unit of our god orbiting the hypermass. And there we will give the badlife Karl-sen to Mars, and we will give ourselves, and this great ship. And through Mars we will live forever!"

He looked into Mitch's face and started to draw his gun, just as Mitch hurled himself forward.

Katsulos tried to spin away as Mitch reached him. Mitch failed to get a solid grip, and both men fell sprawling, a few feet apart. Mitch saw the gun muzzle swing round on him, and dived desperately for shelter behind a row of seats. Splinters flew around him as the gun blasted. In an instant he was moving again, in a crouching run that carried him into the temple of Venus by one door and out by another. Before Katsulos could sight at him for another shot Mitch had leaped down an exit stairway.

As he emerged into a corridor, he heard gunfire from the direction of the crew's quarters. He went the other way, heading for Hemphill's cabin. At a turn in the passage a black uniform stepped out to bar his way, aiming a pistol. Mitch charged without hesitation, taking the policeman by surprise. The gun fired even as he knocked it aside, and then his rush bowled the black uniform over. Mitch sat on him and clobbered him with fists and elbows until he was quiet.

Then, captured gun in hand, Mitch hurried on to Hemphill's door. It slid open before he could pound on it, and closed again as soon as he jumped inside.

A dead black-uniform sat leaning against the wall, unseeing eyes aimed at Mitch, bullet-holes patterned across his chest.

"Welcome," said Hemphill drily. He stood with his left hand on an elaborate control console that had been raised from a place of concealment inside the huge desk. In his right hand a machine pistol hung

casually. "It seems we face greater difficulties than we expected."

IV

Lucinda sat in the darkened cabin that was Jor's hiding place, watching him eat. Immediately after his escape she had started roaming the ship's passages, looking for him, whispering his name, until at last he had seen her and had answered.

Since then she had been smuggling food and drink to him.

He was no mere boy, as she had thought at first glance. He was a man of about her own age, with tiny lines at the corners of his suspicious eyes. Paradoxically, the more she helped him, the more suspicious his eyes became.

Now he paused in his eating to ask: "What do you plan to do when we reach Nogara, and a hundred of his men come aboard to search for me? They'll soon find me then."

She wanted to tell him about Hemphill's plan for rescuing Karlсен. Once Johann Karlсен was aboard, no one on this ship would have to fear Nogara. Or so she felt. But just because Jor still seemed suspicious of her, she hesitated to trust him with a secret.

"You knew you'd be caught eventually," she countered. "So why did you run away?"

"You don't know what it's like, being their prisoner."

"I do know."

He ignored her contradiction. "They trained me with the others, to fight in the arena. And then they singled me out, and began to train

me for something even worse. Now they flick a switch somewhere, and I start to kill, like a berserker."

"What do you mean?"

He closed his eyes, his food forgotten. "I think there's a man they want me to assassinate. Every day or so they put me in the temple of Mars and drive me mad, and then the image of this man is always sent to me. Always it's the same face and uniform. And I must destroy the image, with a sword or a gun or with my hands. I have no choice when they flip that switch, no control over myself. They've hollowed me out and then filled me up again with their own madness. They're madmen. I think they go into the temple themselves and turn the foul madness on, and wallow in it before their idol."

He had never said so much to her in one speech before. She was not sure how much of it was true, but she felt he believed it all, and she reached for his hand.

"Jor, I do know something about them. That's why I've helped you. And I've seen other men who were really brainwashed. They haven't really destroyed you, you'll be all right again some day."

"They want me to look normal." He opened his eyes, which were still suspicious. "Why are you on this ship, anyway?"

"Because." She looked into the past. "Two years ago I met a man called Johann Karlsen. Yes, the one everyone knows of. I spent about ten minutes with him, before he—disappeared." She sighed. "If he's still alive, he's certainly forgotten

about me. But I fell in love with him."

"In love!" Jor snorted, and began to pick his teeth.

Or I thought I fell in love with him, she said to herself. Watching Jor now, understanding and forgiving his sullen mistrust, she realized that she was no longer able to visualize Karlsen's face clearly.

Something triggered Jor's taut nerves, and he jumped up to peek out of the cabin into the passage. "What's that noise? Hear? It sounds like fighting."

"So." Hemphill's voice was grimmer than usual. The surviving crewmen are barricaded in their quarters, surrounded and under attack. The damned berserker-lovers hold the bridge, and the engine room. In fact they hold the ship, except for this." He patted the console that he had raised from its concealment inside Nogara's innocent-looking desk. "I know Felipe Nogara, and I thought he'd have a master control in his cabin, and I thought we might possibly need it. That's why I had myself quartered in here."

"What all does it control?" Mitch asked, wiping his hands. He had just dragged the dead man into a closet. Katsulos should have known better than to send only one against the High Admiral.

"I believe it will override any control on the bridge or in the engine room. With it I can open or close most of the doors and hatches on the ship. And there seem to be scanners hidden in a hundred places, connected to this little viewscreen.



The berserker-lovers aren't going anywhere with this ship until they've done a lot of rewiring, or gotten us out of this cabin."

"I don't suppose we're going anywhere either," said Mitch. "Have you any idea what's happened to Lucy?"

"No. She and that man Jor may be free. And they may do us some good, but we can't count on it. Spain, look here." Hemphill pointed to the little screen. "This is a view inside the guardroom and prison, under the arena's seats. If all those individual cells are occupied, there must be about forty men in there."

"That's an idea. They may be trained fighters, and they'll certainly have no love for the black uniforms."

"I could talk to them from here," Hemphill mused. "But how can we free them and arm them? I can't control their individual cell doors, though I can keep the enemy locked out of that area, at least for a while. Tell me, how did the fighting start? What set it off?"

Mitch told Hemphill what he knew. "It's almost funny. The cultists have the same idea you have, of taking the ship out to the hypermass and going after Karlsen. Only of course they want to give him to the berserker machine." He shook his head. "I suppose Katsulos hand-picked cultists from among the police for this mission. There must be more of them around than any of us thought."

Hemphill only shrugged. Maybe he understood fairly well those fanatics out there whose polarity hap-

pened to be opposite from his own.

Lucinda would not leave Jor now, nor let him leave her. Like hunted animals they made their way through the corridors, which she knew well from her days of restless walking. She guided him around the sounds of fighting, to where he wanted to go.

He peered around the last corner, and brought his head back to whisper: "There's no one at the guardroom door."

"But how will you get in? And some of the vultures may be inside, and you're not armed."

He laughed soundlessly. "What have I to lose? *My life?*" He moved on around the corner.

Mitch's fingers suddenly dug into Hemphill's arm. "Look! Jor's there, with the same idea you had. Open the door for him, quick!"

In the temple of Mars, most of the painted panels had been removed from the interior walls. Two black-uniformed men were at work on the mechanism thus revealed, while Katsulos sat in the center, watching Jor's progress through his own secret scanners. When he saw Jor and Lucinda being let into the guardroom, Katsulos pounced.

"Quick, turn on the beam and focus on him! Boil his brains with it. He'll kill everyone in there, and then we can take our time with the others."

His two assistants hurried to obey. They arranged cables and a directional antenna. One asked: "He's the

one you were training to assassinate Hemphill?"

"Yes, his brain rhythms are on the chart. Focus on him quickly!"

"Set them free and arm them!" Hemphill's image shouted, from a guardroom viewscreen. "You men there! Fight with us and I promise to take you to freedom when the ship is ours. And I promise to take Johann Karlsen with us, if he's alive."

There was a roar from the cells at the offer of freedom, and another roar at Karlsen's name. "With him, we'd go on to Esteel itself!" one prisoner shouted.

When the beam from the temple of Mars struck downward, it went unfelt by everyone but Jor. The others in the guardroom had not been conditioned by repeated treatments, and the heat of their emotions was already high.

But the beam hit Jor's sensitized brain with overwhelming force, just as he picked up the key that would open the cells. In a paroxysm of rage he dropped the keys, and grabbed an automatic weapon from the arms rack. The first burst he fired shattered Hemphill's image from the viewscreen. With the fragment of his mind that was still his own, he felt despair like that of a drowning man. He knew he was not going to be able to resist what was coming next.

When Jor fired at the viewscreen, Lucinda understood what was being done to him.

"Jor, no!" She fell to her knees before him. The face of Mars looked down at her, frightening beyond

anything she had ever seen. "Jor, stop it! I love you!"

Mars laughed at her love, or tried to laugh. But Mars could not quite manage to point the weapon at her, for Jor was trying to come back into his own face again, now coming back halfway, struggling terribly.

"And you love me, Jor, I can see it. Even if they force you to kill me, remember that I know that."

Jor felt a healing power, opposing the power of Mars. To his mind came the pictures he had once glimpsed in the temple of Venus. Of course, there must be a countering projector built in up there, and someone had managed to turn it on.

He came above his red rage like a swimmer surfacing, lungs bursting, from a drowning sea. He looked down at the gun in his hands. With a great effort of will he forced his fingers to begin opening. Mars still shouted at him, louder and louder, but Venus' power grew stronger still. His hands opened and the weapon clattered on the floor.

Once the gladiators had been freed and armed, the fight was soon over, though not one of the cultists tried to surrender. Katsulos and the two with him fought to the last from inside the temple of Mars, with the hate projector turned up to maximum power, and the recorder, chanting voices roaring out their song. Perhaps Katsulos still hoped to force his enemies into acts of self-destructive rage. Or perhaps he had the projector on as an act of worship.

Whatever his reasons, the three inside the temple absorbed the full

effect themselves. Mitch had seen bad things before, but when he at last broke open the temple door, he had to turn away for a moment.

Hemphill showed only satisfaction at seeing how the worship of Mars had culminated aboard *Nirvana II*. "Let's see to the bridge and engine room first. Then we can get this mess cleaned up and be on our way."

Mitch was glad to follow, but he was detained for a moment by Jor.

"Was it you who managed to turn on the counter-projector? If it was, I owe you much more than my life."

Mitch stared at him blankly. "Counter-projector? What're you talking about?"

"But there must have been . . ."

When the others had hurried away, Jor remained in the arena for a few moments, looking in awe at the thin walls of the temple of Venus, where no mindbeam projector could be

hidden. Then a girl's voice called, and Jor too hurried out.

There was silence in the arena.

"Emergency condition concluded," said the voice of the intercom station, to the rows of empty seats. "Ship's Records returning to normal operation. Last question asked was about basis of temple designs. Chaucer's verse relevant to temple of Venus follows, in original language:

"I recche nat if it may bettre be

To have victorie of them, or they of me

So that I have myne lady in myne armes.

For though so be that Mars is god of Armes,

Your vertu is so great in hevене above

That, if yow list, I shall wel have my love . . ."

Venus smiled, half-risen from her glittering waves.

END

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The Pretend Kind

by E. CLAYTON McCARTY

He was warned not to believe in his fantasies. What was he to do when he met reality?

At supper Tommy Wilson casually mentioned to his parents, "I had a nice long talk with God today."

Amy Wilson corrected her little son sweetly. "We don't call that talking, Tommy. We say it is praying."

"Oh, it wasn't saying prayers," Tommy insisted. "We just had a talk — almost until supper time. And He said He couldn't come home to supper with me because He had to meet some friends."

The senior Wilsons exchanged glances and let the topic die. They had developed a certain immunity to surprise over the few years since Tommy's birth, for he was a precocious little fellow, given to long moody silences and unexpected ex-

cursions of the mind. However, while the evening bath ritual progressed Tommy looked up from an intense concentration upon sailing his plastic boats and remarked, "God looks just like an astronaut."

"That's very nice," commented Amy Wilson, "but we must be careful to know which things are true and which are the sort we play make-believe games with."

"Oh, this is a true one," Tommy answered.

She said, "Remember how we tell the difference between the real things and the pretend kind? Could you see this astronaut when you had your eyes closed?"

Tommy mumbled, "No." Then he chortled triumphantly. "That makes

Him true, because you can still see the make-believe ones with your eyes closed."

Patiently, and slightly worried, Amy continued the test. "Could you touch this person? Could you feel it in your fingers when you did?"

"Oh, yes." Tommy giggled at some memory. "He held my hand when we went exploring in the park, and it made funny tickles go all through me."

Amy called her husband.

"All right, Tommy," Ben assumed the interrogation, "we've got some problems here that we need to understand. Now you pay attention and think a long time before you answer me, because it could be very bad if you don't. You met a man today and went exploring with him?"

"It wasn't a man," insisted Tommy. "It was God."

"But he looked like an astronaut — helmet and everything?"

"He didn't have the helmet on. He was carrying it."

"Tell Daddy the real truth, Tommy," his mother admonished with sweet firmness. "You and the little Beckwith boy, who got that astronaut suit last Christmas, went down by the river, and you're afraid to admit it because you feel you will be spanked."

"Oh, no!" Tommy shook his head violently. "It wasn't Jerry; it was God."

Ben took over again. "But he looked like Jerry Beckwith —" watching Tommy's stubbornly shaking head — "then like another little boy — or girl about your size."

"He was bigger," Tommy stated firmly. "Tall as the ceiling."

"You let a complete stranger persuade you to go through the woods to the river and . . .?"

Tommy heard his mother give a sort of moan. "Tommy! Tommy!" she cried. "Don't you remember? You are never to allow anyone you don't know take you anywhere. Always run and call for help when somebody like that talks to you."

"But I did know Him, Mommy. It was God — and you told me God was all right."

"How could you be certain this stranger was God, son?" Ben tried to control his voice.

"He was 'way tall, and there was a funny shining in His face." Tommy yawned. "And He came out of the sky."

Tommy's father forced himself to sound cheerful and said, "I'll tell you what, son: you just go to sleep now and forget all about it. Then tomorrow we'll go to the zoo. How about that?"

"Okay."

Ben signaled his wife and they started to tip-toe from the room. Tommy murmured between prodigious yawns, "That's what God told me too."

"What did he tell you, dear?" Amy prompted softly.

"He told me to forget all about talking to Him. Only he said it funny, like this: 'Forget, Tommy; forget, Tommy' — a long time, and His eyes got bigger." Tommy swallowed half the room in a wide yawn and popped off to dreamland, as healthy little boys sometimes do.

Ben looked at his wife and saw she was near hysteria.

"I've been trying to tell you, and you won't listen to me," she repeated almost incoherently. "His mind is running out of control. He's losing the power to distinguish between those imaginative worlds he builds constantly and what is real."

"Now whose imagination's getting out of bounds?" Ben patted his wife and roughed her hair. "There's bound to be a bit of basic truth under what the kid's saying. Some stranger must have won his confidence, and Tommy has magnified the event because his conscience told him this was a thing we'd warned him against. If you can hold on to yourself and stop crying for a while I'll take a walk down our block and ask neighbors if any of them noticed a stranger hanging around today."

She whirled away and faced Ben stubbornly. "We're going to have a psychiatrist! You won't stop me this time. We're losing our child, Ben — to a world that doesn't exist."

He shrugged, resigned. "If it will keep you happy."

"Then let's do it now," Amy said urgently. "Jerry Beckwith's father — you can talk to him tonight."

"Ought we let neighbors know about this? People think there's something odd about a family when one of them needs a psychiatrist."

"I don't care what anybody thinks," Amy cried out. "It doesn't matter whether George Beckwith is a neighbor or not. He's supposed to be the best psychiatrist in town. Ben, don't put this thing off. Go right now!"

"All right, gal. But don't fly into pieces before I have time to cross the lawn." Ben stalked out the front door, muttering unhappily to himself.

When he returned with Doctor Beckwith across the dew spattered grass Ben found Amy waiting outside. "He's awake again," she called. "He's got a long story about this afternoon."

"Think you might have trouble figuring whether it's the mother or her son who needs you?" Ben realized suddenly that his attempt at humor sounded more like a rueful complaint.

However, Beckwith chuckled. "We'll have a chat with Tommy first." He patted Amy's shoulder. "I'll bet you're ready to join the club with Martha and me to agitate for having it made a law that kids get born after they are thirty years old."

They found Tommy sitting in the middle of his bed, bubbling with excited appreciation of the scene he was creating. "Now, Tommy, tell Doctor Beckwith what you just said to me," Amy coaxed. "everything — how the man came, where he . . ."

"It was not a man," Tommy insisted vehemently. "It was God."

George Beckwith pulled a chair up and sat directly in front of the boy. "We'll agree it must have been God so you won't be afraid your parents will punish you for talking to a stranger. How about that, son?"

Tommy muttered, "Okay."

"So why don't you tell me the whole story of your adventure?"

Hesitating and somewhat worried, Tommy looked sideways at his

father, but he warmed up and forgot to be wary as excitement of his narration grew. "I was playing in the park"

"Our park? Across the street?" Ben asked sharply, and became silent at a warning gesture from Beckwith.

"Way down at the other end," admitted Tommy reluctantly, and his father spoke quickly, "That's all right this time, son. Go on."

"There was a dead turtle down by the river, and millions of ants walking inside his house. The policeman told me about it; that's why I went," he finished defensively.

Amy whispered in the boy's ear, "Daddy doesn't mind."

"That was when God came down out of the sky, and He watched the ants with me. I remembered what Daddy told me about ants, and so I scraped a big piece of their trail away so He could see how funny ants behaved when they got lost and started running around in circles.

"And God said, 'Does your father like to show you how to make things lose their way and be afraid?' And I told Him Daddy wants me to know all about animals and bugs. God was very interested in you, Daddy, and how you helped me find birds' eggs for my collection. He wanted to know why we stole eggs from the birds, and I told Him how we put them in a box so we could look at them and show them to other people when Mommy had a big party. And He said, 'Is everybody like your Daddy?' And I said, 'Oh, yes.'"

Tommy leaned toward the doctor. "I told God about all the horns

you hang in your den that you took away from the deer when you killed them — and the big stuffed fish, and about how Miss Dorsey has a jar of poison that we can't touch at school, and we bring bugs we find and she puts them in the jar until they're dead, and we stick them on pins and keep them on a shelf where everybody can look at them.

"And God said, 'Do you like to kill things so you can look at them?' And I said, 'Oh, yes; it's fun, because we always win and have a bigger collection than Miss Runge's room has. That's the way we study things, Miss Dorsey always tells us.' And then I smashed an ant to show Him how things died.

"And God said He liked to study things too. But He studies little children instead of bugs. Only He doesn't need to kill them first. He said He's a — 'pologist; He learns about civ—civiliz-shuns. That's His job. He said He could always tell what a civiliz-shun would be when it grew up if He studied little children. I don't know what He means."

"What else did you talk about?" Doctor Beckwith asked casually. "Your new bicycle? Or school?"

Tommy shook his head. "God wanted to hear about things dying — mostly. I told Him how Jeanie got run over by a car that didn't stop and nobody ever found out who. And He asked me what we would do if somebody did find out who, and I said, 'Oh, he'll get killed in the jail.' And I told Him all about that chair with elec-trisity in it that Daddy said they had in a dungeon at the jail. And God said, 'Does your

daddy kill people too?" And I said, "Oh, yes."

Amy made a strangled sound. "Tommy! You shouldn't have said that! You know your father is the sweetest, kindest man alive. He would never kill anybody."

Tommy looked at her with widened eyes. "But you said he did."

"When did I ever say anything like that?"

"When he was in an airplane. When he got a medal for killing all those people in the war, and we all had to stand while the soldiers marched and the gen'ral pinned those ribbons on Daddy's uniform and I got sick from ice cream." Tommy finished with several yawns.

Beckwith signaled, and the parents unobtrusively moved toward the door. They heard Tommy's murmured, "Good night, Daddy; Good night, Mommy."

The doctor joined them later, frankly puzzled. "It's a fantasy that's settled in pretty deep," he told them, "so strong that this character he talks about has become as real to him as you or Amy. He's not retreating into it yet to escape from the problems around him; that's a hopeful sign."

"But your word 'yet' means you are afraid he will take the next step toward withdrawal — and insanity?" Amy cried out. And Ben snapped, "Let's have it straight, George. We're friends and neighbors; I want your verdict without any of the evasions and glib double-talk doctors dish out."

"Actually, I'm not sure, Ben."

Beckwith sat and fished out his pipe. "Tommy's played with Jerry enough so that I've observed samples of that astounding imagination of his. I've watched him and Jerry talking to their toys as if they lived, but neither kid has ever lost the sense of its being just a game. So I took a chance and tried a bit of hypnotism on Tommy. I thought I could focus this aberration for him so he'd understand it clearly as a creation of his imagination."

"But it didn't work," Amy broke in, her perception sharpened by anxiety.

Beckwith laughed ruefully. "That boy cannot be hypnotized. I thought I had him under; he reacted exactly like anyone I've put into deep hypnotic trance; he responded in all the expected ways to my suggestions."

He stopped, shook his head, and the edge of ironic amusement came into his voice. "When I waked your son, he not only had this fantasy as vividly as ever, he also told me I was all wrong about it being a game of pretend with his toys. That just doesn't happen in the case of a person who has been hypnotized and then awakened with the command to forget all that occurred during the session. Your Tommy was able to repeat every damned word we said to each other while I had him under — verbatim."

The next day was Sunday.

Ben came outside to wash his car and saw his neighbor lay down pruning shears and beckon. "I just spotted your son slipping across into the park," he told Ben. "Let's see if

we can get a line on what he's up to."

They found it relatively easy to keep the little boy in sight, observing from an upper path paralleling his course. From its height they could look down the wooded slope and see him plainly most of the time, meandering along with an aimlessness which indicated that he had no special destination in mind, stopping to turn over a rock to see what it hid, or to watch a bird or chase a butterfly. At times interlaced branches hid the boy from them, but they could hear him singing to himself or talking to a squirrel that swore at him from the safety of an oak eyrie, and he appeared in the next open area at about the time and place the men judged was right."

Then, in the deepest part of the forested ravine, Tommy passed from view under a giant oak's foliage and did not come out of its shadows on time. Ben looked at George Beckwith and asked, "Think we'd better side-hill down that way and see what's keeping the kid?"

"Give him a few more minutes," the psychiatrist muttered. "He's probably flat on the ground watching a bug."

But Tommy did not emerge. Ben and George finally slipped down the slope and found no sign of the little boy under the oak. The doctor growled, "I'll be damned!"

And Ben muttered, "I suppose the rascal could have spotted us and sneaked away across the bottom of the ravine—but he'd need to pass over open ground in any direction from this tree."

They stood a few minutes in the shade discussing the eel-like qualities of children and scanning the hill slopes. Finally they moved off to continue a random search of the park.

Tommy was playing peacefully in the patio when they returned, but his eyes danced with mischief. "I fooled you, Daddy," he chortled.

"You sure did," Ben agreed. "How did you slip away from that tree without us spotting you?"

Tommy's voice choked with glee. "I didn't. I was there all the time."

"Now wait a minute, son; there was no place to hide."

"I was in the tree."

Beckwith remarked casually, "That's a mighty big tree for you to climb."

"Oh, I didn't climb up the tree; I went inside. God was waiting for me, and He said, 'Your father is trying to find you, so let's play a joke on him.' So he took my hand and we walked right into the tree, and we saw you looking everywhere, and I heard Doctor Beckwith say a naughty word. And then you went on toward the other end looking for me, and God came home with me. He wanted to see my toys."

Ben found himself unable to speak rationally, and Beckwith's question came only after some hesitation. "Was God playing with you when we crossed the street just now?"

"Oh, no," chortled Tommy. "He went away. But He helped me make things with my erector set, and He really liked my machine gun and the tank that shoots, and that bazooka . . ."

Ben yelled. "Now wait a little cotton-pickin' minute! Those war toys are locked up in the store room." He turned to his wife, a question in his inflections. "That is, they're supposed to be — those damned monsters and toy guns and war stuff the grandparents gave him for Christmas?"

"They certainly are," snapped Amy. "And just remember that it was your parents as well as mine." She looked hard into Tommy's eyes. "Now Tommy, you know this is a lie; you know those shooting toys are in the store room."

"Oh, I took God in there to see them," Tommy answered.

"Son," his father said gravely, "you know you cannot get into that room because the door is always locked."

"Oh, we didn't use the door," Tommy interrupted, filled to the brim with laughter. "We just went right through the back wall. God put His arm around me and said something about our atoms would have to go between some other atoms and it would feel different and not to be afraid. And I wasn't. It felt funny — like dancing all over inside your skin."

"That's quite a stunt, son," Ben commented, trying to control his voice.

"And then I did something very bad." Tommy's face puckered up. "I let one of Daddy's secrets out. I couldn't quit after I started to say it, really-truly. I told Him all about Daddy working on some rockets that would kill all the Russians."

"And God made a funny joke. He

said. 'We can't let that happen, can we? We'll just have to exterminate all the pests.' He didn't seem to be talking to me then, because He said, 'Could you hear all the child said?' several times. I asked Him what ex-term-mm-ate was, and He said, 'Oh, we just make everything awful hot around the germs until they burn up, and then my friends won't be in any danger from it spreading to them.' And I told God that was what Daddy did to hornets' nests with his blowtorch, and God laughed. That's why I knew it was a joke."

Beckwith broke in with his soothing voice. "Tommy, I need a little holiday in the morning. How about taking me with you when you talk to this person you call God?"

Tommy shook his head. "I can't, because God isn't going to come down any more."

Amy cried, "How do you know that?"

"He said so."

Outside Beckwith shook his head thoughtfully. "This new development I don't understand," he told Ben Wilson. "The boy is deliberately ending this particular fancy. Does that mean my offer to go with him chased him back into reality? Or is this the prelude to constructing another imaginary adventure?"

Their wondering had only a short span to plague them. They understood before the falling of another night — for the space of a few breaths only — when the mile-long ships appeared over Earth, and the fires began.

END

To Conquer Earth

by GARRETT BROWN

*They came from space to
conquer Earth — but why
didn't Earthmen show fear?*

The savage squatted naked on a flat rock. Tight-skinned from the bitter cold, he swayed slowly back and forth like a small unkempt brown bush in the perpetual icy winds of Tierra del Fuego. His long greasy hair streamed out horizontally — sometimes whipping completely around him and blowing in his eyes. From under crusted lids, watching the last of the sun, they were bloodstained and blank as stones. He was alone beneath the heavy sky, the very incarnation of Dichot's dark masterpiece in oils, "The Aborigine". Except for the flotsam of civilization that washed around him in the blowing sand, he might have been any one of his naked ancestors who in succession endured the elements on the same rock since the coming of man to the Island.

Alas, however, this particular savage Lived Better Electrically.

He brushed his teeth and decorated himself in poster paint with an electric toothbrush, procured his food with an electric can-opener, deloused himself with *Sweat Sock* deoderant, forswore tribal legends for articles like "New Hope for the Dead" in *Reader's Digest*, and drank excessively of Tierra's explosive domestic bourbon.

Now darkness was enveloping the island with characteristic speed. The savage struck a cigar on his horny foot, inhaled with a grunt of aboriginal satisfaction, and turned on his TV.

The late show was sagging as usual, despite a slick foundation of commercials peddling the new force-field brassiere. The savage was quite accustomed to nonsupport of all

kinds, and his attention wandered. He heard it then very suddenly, even over the noise of wind and windbag; saw the blowing grassland illuminated as if by the rising of the moon. He looked up in time to watch the flaring spot expand to a monstrous silver globe, ringed in its own fires and shaking the ground with painful thunder. He shielded his face as it hurtled to a landing on the slope below, and while the risen dust cloud was stripping away in the wind, he drank from his bottle and waited and waited, with eyes growing somewhat more spiritual than before.

After an hour, the ship swept again northward, above all but the thinnest remnants of the atmosphere. It was nightside, but from the edge of space the great curve of one horizon burned faintly orange with the coming dawn. The other horizon was only visible because it occulted an immense black wound out of the sphere of stars. The continents, however, were sharply defined. Most of the land surface glowed a ragged shimmering gray from the numberless lights of the single metropolis that stretched from shore to shore and slumbered unknowing below.

On the control deck, Captain Crunch was alone with the data recorders, watching the city-continent move slowly down the viewscreen. His translucent body lay in its inflated bowl and quivered with irritation, and flaccid eddies of flesh rolled from one side of the couch to the other. Blast! The interview with the primitive had been ridicu-

lous! (Before even leaving the ship he had gotten two gelatinous legs stuck in one leghole of his space-suit and was forced to hop suddenly around the deck to keep from falling, accompanied by muted plops of mirth from officers and crew.)

The being selected for "first contact" had been apparently unmoved by the ship's arrival. Amazed, after a short wait he decided to hasten Stage Two. He ordered out the full display: robots, weapons, lights, lines of guards, and technicians and equipment, and still the creature just sat there. They had almost decided that it was non-sentient—a vegetable, growing in front of the radiating box—when it arose, stretched its grotesque limbs, and lurched down to the very boundary of the death screen. It then *motioned* for attention and inscribed a recognizable face of the planet in the dust! Quite plainly indicated were the polar ice-caps, its own island, and finally and unmistakably, a spot on the east coast of the northern continent. The native then pointed several times toward the north, and retired to watch his strange machine. The meeting had been over! (It was incredible! He could still hardly believe it!)

To salvage the initiative, Crunch ordered Stage IIa. All of the artifacts were gathered and dissected, along with their owner.

The creature's brain proved to be so jammed with trivia that no information survived analysis beyond a vocabulary of the planet's dominant language. The first contact had shown neither fear, bewilderment, nor hostility in any form Crunch

was able to recognize. With some uneasiness, he had determined to seek the place specified in the northern hemisphere.

At this point, he was buzzed by Electromagnetic and Ranging. The "humans" were broadcasting all up and down the spectrum, from radio to ultraviolet. Automatic beacons! D-F indicated a dark spot on the screen that was a sizeable landing strip. As they started to let down, the long coastline was just moving into dayside.

The President sat up into the cold bedroom. The sound of a landing was always a hand that pulled him from sleep by the stomach. The First Lady slept fitfully on as he padded to the window and stood shivering in the increasing light.

A spheroid. It gleamed dry and hot on the dewy grass-grown concrete.

He returned noiselessly for the state bathrobe and sat on the edge of the bed. After a short time the blood flowed again in his legs and the birds resumed singing. The President was a man in his late forties, not lean, but giving that impression, with a gray unshaven face and soft eyes. He watched the ship with unguarded weariness. In minutes, it had voided a scouting robot that scuttled away and out of his field of view. Shortly the thing was clanking and beeping in the garden below and woke the First Lady.

She sat up, breathing warmly beside him. They looked at each other for a moment, and she rubbed her

eyes and went for his breakfast. Without haste, he dressed in the special suit and stood contemplating her cooling impression in the bed.

The President and the aliens arrived outside at the same moment.

He saw that they were big and purple and repulsive—perhaps seven feet high in bulging suits with transparent domes. He had approached to five yards and was pleased to see them growing restless; shivering, like Jell-O anticipating the spoon. He spotted the standard galactic translator, and was about to offer his crystalline vocabulary, when there was a barrage of plopping sounds from one of them, and the machine said with a slight Spanish accent: "Halt! Who goes there?"

That was unfortunate. It meant a mutilated corpse lying around somewhere, probably a movie addict from the quality of the challenge. "All right," he said, and stopped. Nothing happened. They watched each other. The President pulled a speech out of his pocket and began to read it aloud. After a few seconds, the machine erupted in the brittle plopping of the alien language.

It was a cold, exhilarating morning, and the meeting was given an unreal, pastoral aspect by the rising mist. "Welcome conquerors," he said brightly, "to the planet Earth. By the authority vested in me by the world government, I, the President of the United States, give you greetings from your new subjects, the people of Earth." He paused and held the paper closer to his eyes. "Excuse me." The machine faltered. He walk-

ed over and held the paper up to the eerie light of the death screen and continued, slower than before. "You will meet with no resistance or hostility, and the something or other, something will be vouchsafed you that . . . I'm afraid I have forgotten my glasses. With your permission I will, as we say, wing it! heh, heh, heh." The President searched his pockets and replaced the speech in one of them. The machine was plopping furiously. "You are to be informed that you can have anything we have on the planet, and that we will abide by your laws, whatever they may be. Also, I was to give you the key to Earth, however, ah . . . gentlemen, it wasn't returned the last time. You won't need it, I'm sure. My name, by the way is Hubert H. Hubris, and my general duty is to greet all conquering super-aliens, show them around, keep them happy. Is it working?" He pointed to the interpreter, which was pouring out a volume of plops and flashing lights and shaking its stand.

There was a stunned silence from the aliens. The President waited. Their grotesque pudding of a commander shuddered in his suit and shot an unreadable look at his subordinates. Then he spoke.

"How did you anticipate our arrival?"

"Not bad," said the President unhelpfully. He shifted to the other foot. "There are models that translate idiomatically, but I have always felt that they lack a certain diplomatic formality. Don't you agree?"

They were trembling like things

washed up on the beach. The commander began to plop ferociously, but the machine subverted the effect by rendering it to English in a perfectly even voice (with a slight Spanish accent): "Silence, earthman. Yours is the audacity of a young and ignorant race. Before you stand the star-guard of the mighty Glom, scourge of the Universe. I am Captain Crunch, ordered to seize the backward worlds in this sector as bases in our struggle with the vicious enemies of the Glom. Your words are not rational; you display no race pride. Where are your people, your armies, your pitiful defenses?"

The Earthman restrained a laugh. "Ah . . . pardon me, your Ignorance," he said, having a little sport with the interpreter, "If you will just let me continue with our usual routine, you will understand your subjects better. Here is a list, in Galactic, of the mineral wealth of the planet, and a tentative schedule of your appearances. I think we can make your stay here quite pleasant." At that point, a very fat young man hustled up behind the president, grinning vacantly. "Well . . . and here is the Vice-President, Edward Plimptosac. Everyone just calls him Flaccid Eddie. He will assist me with the lesser details of your tyranny." (Want to see some dirty prescriptions? Twelve-year-old-virgins?)

The Glom had resented Flaccid Eddie from the first. Although he was opaque, the latter probably looked more like them than any other Earthman; and to their commander, he was a gross, insulting caricature

of the Noblest Form. A small pasty apparition of disgusting solidarity! Gods! This tiresome planet! His brains were very weary as he sloshed on his seat in the hurtling bus. These last three days had tested the legendary Glom composure to the quivering limit. Crunch had been forced to censor the daily reports back to base, his mission hindered everywhere by bewildering indignities. He had to pity the little vermin, but he hated them because something about their squalid affluence rang very close to home. No one had even come out to watch the parade, and no one had shown up at the exhibits. And now this foolish 'television' business. (He almost wished that he could believe it was all a super-plot.) And that devious primitive "Hubert"! They were on the way to the studio to "broadcast to all humanity, and rally them behind the Glom war effort." He groaned as the bus dove in and out of the huge pot-holes.

The thrice-cursed scouting robot was *lost*. After discovering nothing of value, it was carried by a crushing mob of humans down into some kind of underground railroad transportation network, and had been swept away somewhere, radiating too weakly to be homed. Looking through its sensors, the Glom techs didn't begin to understand how to get it out. Crunch, of course, couldn't make a direct request of a primitive for any reason. Flaccid Eddie's response to an obvious hint was to suggest that they provide it with a fare.

They were rushing down a paved strip in the crude vehicle provided by Hubert. Cars and trucks were rushing at them from all directions, dodging and swerving with spindly Earthmen leering from the windows. The center and sides were littered with wreckage; burned, bent, and twisted along every mile. Captain Crunch was shocked to see the broken carapace of one of Glomdom's beetle-like galactic rivals protruding horribly from an Earth vehicle wrapped around a bridge abutment.

"The things were here about a month ago," Flaccid Eddie explained, "and they liked to drive around, and a lot of them got killed. Say, don't I smell something? Yes, I do!" He gagged happily, "It has ammonia in it!"

Crunch looked quickly to see who was turning more purple, saw the rip in his suit, remembered being jostled against the Vice-President's tin lunch-box, and turned more purple. As he lost consciousness, he panicked and triggered his personal death screen.

He awoke oozing around naked in a transparent globe of methane-ammonia, covered with painful oxidation and fighting to breath. His first horrified thought was *rebellion!* He was surrounded by whirling lights and figures pointing red-eyed machines at him. He saw his suit lying on the floor, ripped in a dozen places. ("Et tu, Plimptosac!") Then the translator, inexplicably battered, was soothing him and explaining: Everything was fine. Although his death screen had killed everyone and crashed the bus, he was *certainly*

not in captivity, and the broadcast would go on as scheduled. He would soon be on the air. The globe? An improvisation—until they could send for another spacesuit.

In Kansas, the Fosdick family television set lit up their five cheerless faces. Father, Mother, grandmother, and children watched the greasy man with the melodious voice.

"Good afternoon, ladies and gentlemen, this is Reginald Phipps, for World Standard News. We have been conquered again, folks, and wait till you see them! They are big fat purple things from—" he asked a question to the side—"well, we don't know where they're from, but you'll love 'em. We bought rights to show you a whole bunch, but they had a little accident coming here on the freeway, and there is only one left. I regret to announce that the Vice-President, Mr. Edward Plimtosac, was also killed. We will join our exciting guest in just a moment, following this brief word from our sponsor." (Lap dissolve and flash to animated squeeze bottle.)

Sweat Sock! It's New! The deoderant that makes you sweat! Science has known for years that perspiration is essential to the body's welfare. At last, friends, here is a deoderant that stimulates this healthful function without the rigors of hard physical labor. Just one application of Sweat Sock, and it will run down your legs, and fill up your shoes!

(Crescendo and fade, camera returns to Phipps. Beside him in a huge transparent plastic bottle, with *Sweat Sock* printed on the front, dangling umbilical tubes and cables, is *the alien*.)

"And now, ladies and gentlemen, I give you the boss of the Glop, our latest and greatest masters, *Captain Crunch!*" The camera closed in. He was slumped, translucent and hideous without his suit, in the bottom half of the globe. He stirred feebly and emitted a muffled stream of plops, like a garbage can being emptied. The translating machine wasn't even on the set, and no one could understand anything he said.

The Fosdicks watched cheerlessly. After a minute, Mr. Fosdick walked over to the set and switched channels with a vicious flick of the wrist.

The subway was jammed with steaming humanity. The scouting robot clung sullenly to a strap in the swaying car. No one paid it the slightest attention, except the children. Every day at nine in the morning and three-thirty in the afternoon, they had kicked it, reviled it, tripped it, and covered its vision sensors with mucilage and bubble gum. Throughout all the long, lonely nights, it had ranged along the rattling cars and the smelly maze of concourses, half-blinded and lost. It had been muscled out of seats by burly charwomen and harassed by leather-jacketed hoods, and the flagging technicians had stopped looking through its remaining eye and listening to the high alien voices of its childish abusers.

Finally its instruction signals ceased entirely, and the robot switched to self-protective override and blasted a huge crater up to the open air in downtown Baltimore. Twenty minutes later, it was seen on Interstate #95, running at full speed, clanking rustily toward Washington.

From his darkened bedroom window, President Hubris watched the departure of the Glom. An hour ago the ship had been sealed. It lay featureless and silent; ominous, like the egg of some too-perfect bird. There had been no final communication, not even a fare-thee-well, when suddenly it flamed and lifted off, rat-

ting the glass, and disappeared ignominiously into the drizzling overcast.

Long after the silence returned, the President saw the robot appear out of the twilight and run jerkily across the dimming white of the concrete. At the center, it jumped up and down, looking skyward, and ran around and around in small demented circles, waving its arms. After a long time, it fell down and flailed itself into inert junk.

The President struck a cigar on his priceless Louis Quatorze chair, inhaled with a grunt of decadent satisfaction and turned on his TV.

END

Back again in *If* — one of the all-time
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SILKIES IN SPACE

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Brown and many others. Don't miss the May *If*!

The Moon is a Harsh Mistress

The battle was on. Mike had played my role as well or better than I could. Finn, when he could be reached, would be handled by "Adam". So I left, fast, calling out Greg's message of love to Mum. She was p-suited and had roused Grandpaw and suited him in—first time in years. Whole family was getting in act. So out I went, helmet closed and lasergun in hand.

And reached lock thirteen and found it blind-dogged from other side with 'nobody in sight through bullseye. All correct, per drill, except stilyagi in charge of that lock should have been in sight.

Did no good to pound. Tried anyhow, of course.

by ROBERT A. HEINLEIN

Illustrated by MORROW

Their fondest hopes for Luna were being realized — it was under the concentrated attack of Earth's mightiest war vessels!

What Has Gone Before —

We Lunarians have put up with a lot from Earth, but time comes when we don't want to put up with more. Earth tells us what we can sell, who we sell it to, how much we can get for it. Means slavery.

But . . . Earth owns us outright. Question is, what can we do about it? I don't mind a gamble — wouldn't mind fighting Earth with a chance to win — but with no chance, no. Luna has no warships, Earth has plenty. Luna has no armies. Earth has armies to burn.

Most of all, Luna is run by a big computer, and Earth owns the computer.

But there's one thing Earth doesn't own — me. And it just so happens that I'm the fellow that fixes the computer . . . and the computer is my good friend I call Mike!

So maybe — just maybe — we Lunarians can do something at last.

So we invent mythical leader named "Adam Selene" — is really Mike — and start rolling. Only one problem: Need help on Earth. That's the hard one, because earthworms I don't know; neither does Mike, neither does any good Loonie. Don't know where to look . . . until chance delivers one into hands, when group of stilyagi kids ask permission to kill him. I save his life, never regret it; name is Stuart LaJoie and is high-power VIP Earthworm indeed.

With him, revolution is good chance. But best chance comes when Company overplays hand. Couple guards rape girl, get killed — fight is on. Now Company falls right into trap — has Moon under attack by every armed ship in space.

All according to plan . . . we hope!

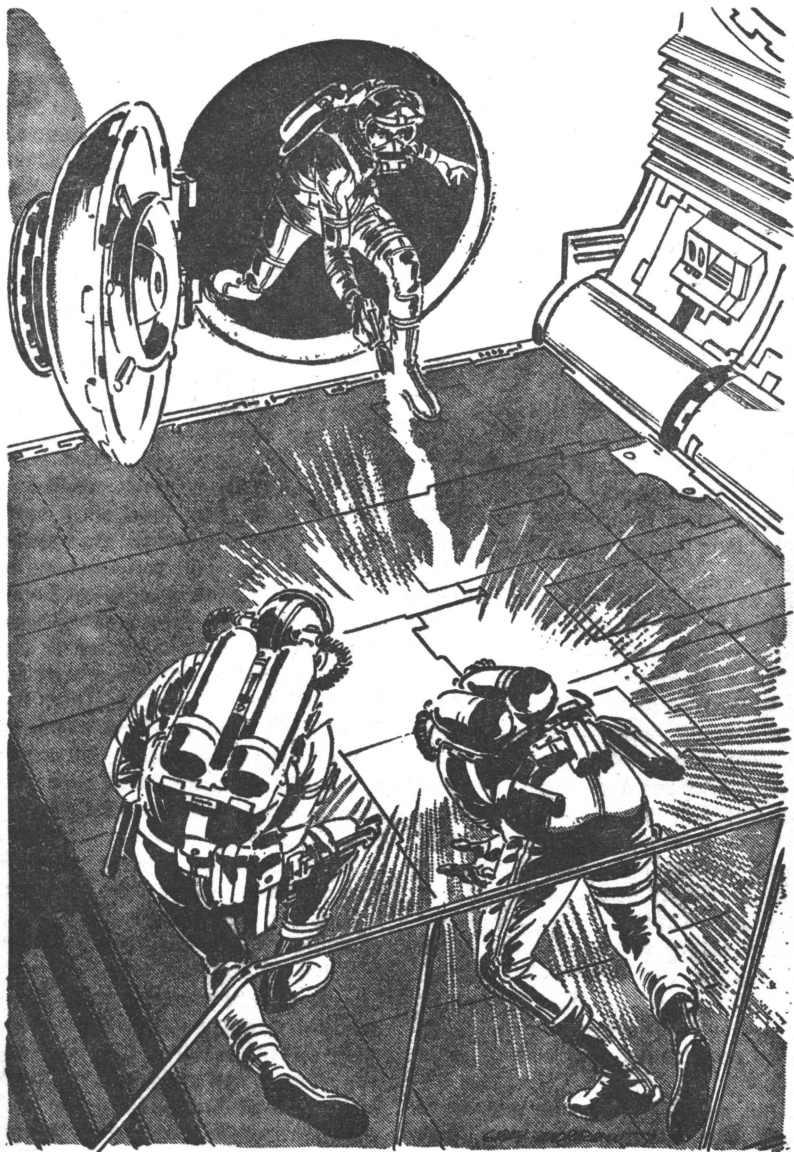
Finally went back way I had come — and on through our home, through our vegetable tunnels and on up to our private surface lock leading to our solar battery.

And found a shadow on its bullseye when should have been scalding sunlight — damned Terran ship had landed on Davis surface! Its jacks formed a giant tripod over me, was staring up its jets.

Backed down fast and out of there, blind-dogging both hatches,

then blind-dogged every pressure door on way back. Told Mum, then told her to put one of boys on back door with a lasergun — here, take this one.

No boys, no men, no able-bodied women. Mum, Gramp and our small children were all that were left; rest had gone looking for trouble. Mimi wouldn't take lasergun. "I don't know how to use it, Manuel, and it's too late to learn. You keep it. But they won't get in through Davis tun-



nels. I know some tricks you never heard of."

Didn't stop to argue. Arguing with Mimi is waste of time—and she might know tricks I didn't know; she had stayed alive in Luna a long time, under worse conditions than I had ever known.

This time lock thirteen was manned; two boys on duty let me through. I demanded news.

"Pressure's all right now," older one told me. "This level, at least. Fighting down toward Causeway. Say, General Davis, can't I go with you? One's enough at this lock."

"Nyet."

"Want to get me an earthworm!"

"This is your post, stay on it. If an earthworm comes this way, he's yours. Don't *you* be his." Left at a trot.

So as a result of own carelessness, not keeping p-suit with me, all I saw of Battle of Corridors was tail end—hell of a "defense minister."

Charged north in Ring corridor, with helmet open; reached access lock for long ramp to Causeway. Lock was open; cursed and stopped to dog it as I went through, warily—saw why it was open; boy who had been guarding it was dead. So moved most cautiously down ramp and out onto Causeway.

Was empty at this end but could see figures and hear noise in-city, where it opens out. Two figures in p-suits and carrying guns detached selves and headed my way. Burned both.

One p-suited man with gun looks much like another; I suppose they took me for one of their flankers.

And to me they looked no different from Finn's men, at that distance—save that I never thought about it. A new chum doesn't move way a cobbler does; he moves feet too high and always scrambling for traction. Not that I stopped to analyze, not even: "Earthworms! *Kill!*" Saw them, burned them. They were sliding softly along floor before realized what I'd done.

Stopped, intending to grab their guns. But were chained to them and could not figure out how to get loose. Key needed, perhaps.

Besides, were not lasers but something I had never seen: real guns. Fired small explosive missiles I learned later. Just then all I knew was no idea how to use. Had spearing knives on end, too, sort called "bayonets," which was reason I tried to get them loose. Own gun was good for only ten full-power burns and no spare power pack; those spearing bayonets looked useful. One had blood on it, Loonie blood I assume.

But gave up in seconds only, used belt knife to make dead sure they stayed dead, and hurried toward fight, thumb on switch.

Was a mob, not a battle. Or maybe a battle is always that way, confusion and noise and nobody really knowing what's going on. In widest part of Causeway, opposite Bon Marche where Grand Ramp slopes northward down from level three, were several hundred Loonies, men and women, and children who should have been at home. Less than half were in p-suits and only a few seemed to have weapons. And pour-

ing down ramp were soldiers, all armed.

But first thing I noticed was noise, din that filled my open helmet and beat on ears—a growl. Don't know what else to call it; was compounded of every anger human throat can make, from squeals of small children to bull roars of grown men. Sounded like biggest dog fight in history. And suddenly realized I was adding my share, shouting obscenities and wordless yells.

Girl no bigger than Hazel vaulted up onto rail of ramp, went dancing up it centimeters from shoulders of troopers pouring down. She was armed with what appeared to be a kitchen cleaver; saw her swing it, saw it connect. Couldn't have hurt him much through his p-suit but he went down and more stumbled over him. Then one of them connected with her, spearing a bayonet into her thigh and over backwards she went, falling out of sight.

Couldn't really see what was going on, nor can remember—just flashes, like girl going over backwards. Don't know who she was, don't know if she survived. Couldn't draw a bead from where I was, too many heads in way. But was an open-counter display, front of a toy shop on my left; I bounced up onto it. Put me a meter higher than Causeway pavement with clear view of earthworms pouring down. Braced self against wall, took careful aim, trying for left chest.

Some uncountable time later found that my laser was no longer working, so stopped. Guess eight troopers did not go home because

of me but hadn't counted—and time really did seem endless. Although everybody moving fast as possible, looked and felt like instruction movie where everything is slowed to frozen motion.

At least once while using up my power pack some earthworm spotted me and shot back. Was explosion just over my head and bits of shop's wall hit helmet. Perhaps that happened twice.

Once out of juice I jumped down from toy counter, clubbed laser and joined mob surging against foot of ramp. All this endless time (five minutes?) earthworms had been shooting into crowd; you could hear sharp *splat!* and sometimes *plop!* those little missiles made as they exploded inside flesh or louder *pouunk!* if they hit a wall or something solid. Was still trying to reach foot of ramp when I realized they were no longer shooting.

Were down, were dead, every one of them.

XL

All through Luna invaders were dead, if not that instant, then shortly.

Over two thousand troopers dead. More than three times that number of Loonies died in stopping them. Plus perhaps as many Loonies wounded, a number never counted. No prisoners taken in any warren, although we got a dozen officers and crew from each ship when we mopped up.

A major reason why Loonies, mostly unarmed, were able to kill

armed and trained soldiers lay in fact that a freshly landed earthworm can't handle himself well. Our gravity, one-sixth what he is used to, makes all his lifelong reflexes his enemy. He shoots high without knowing it, is unsteady on feet, can't run properly—feet slide out from under him. Still worse, those troopers had to fight *downwards*; they necessarily broke in at upper levels, then had to go down ramps again and again, to try to capture a city.

And earthworms don't know how to go down ramps. Motion isn't running, isn't walking, isn't flying. Is more a controlled dance, with feet barely touching and simply guiding balance. A Loonie three-year-old does it without thinking, comes skipping down in a guided fall, toes touching every few meters.

But an earthworm new-chums it, finds self "walking on air". He struggles, rotates, loses control, winds up at bottom, unhurt but angry.

But these troopers wound up dead; was on ramps we got them.

Those I saw had mastered trick somewhat, had come down three ramps alive. Nevertheless only a few snipers at top of ramp landing could fire effectively. Those on ramp had all they could do to stay upright, hang onto weapons, try to reach level below.

Loonies did not let them. Men and women (and many children) surged up at them, downed them, killed them with everything from bare hands to their own bayonets. Nor was I only lasergun around. Two of Finn's men swarmed up on balcony on Bon Marche and, crouching there,

picked off snipers at top of ramp. Nobody told them to, nobody led them, nobody gave orders. Finn never had chance to control his half-trained disorderly militia. Fight started, they fought.

And that was biggest reason why we Loonies won: We fought.

Most Loonies never laid eyes on a live invader. But wherever troopers broke in, Loonies rushed in like white corpuscles—and fought. Nobody told them. Our feeble organization broke down under surprise. But we Loonies fought berserk and invaders died. No trooper got farther down than level six in any warren. They say that people in Bottom Alley never knew we were invaded until over.

But invaders fought well, too. These troopers were not only crack riot troops, best peace enforcers for city work F.N. had; they also had been indoctrinated and drugged. Indoctrination had told them (correctly) that their only hope of going Earthside again was to capture warrens and pacify them. If they did, they were promised relief and no more duty in Luna. But was win or die, for was pointed out that their transports could not take off if they did not win, as they had to be replenished with reaction mass—impossible without first capturing Luna. (And this was true.)

Then they were loaded with energizers, don't-worries and fear inhibitors that would make mouse spit at cat, and turned loose. They fought professionally and quite fearlessly—died.

In Tycho Under and in Churchill they used gas and casualties were more one-sided. Only those Loonies who managed to reach p-suits were effective. Outcome was same, simply took longer. Was knockout gas as Authority had no intention of killing us all. Simply wanted to teach us a lesson, get us under control, put us to work.

Reason for F.N.'s long delay and apparent indecision arose from method of sneak attack. Decision had been made shortly after we embargoed grain (so we learned from captured transport officers); time was used in mounting attack—much of it in a long elliptical orbit which went far outside Luna's orbit, crossing ahead of Luna, then looping back and making rendezvous above Farside. Of course Mike never saw them; he's blind back there. He had been skywatching with his ballistic radars. But no radar can look over horizon. Longest look Mike got of any ship in orbit was eight minutes. They came skimming peaks in tight, circular orbits, each straight for target with a fast dido landing at end, sitting them down with high gee, precisely at new earth, 12 Oct 76 Gr. 18h-40m-36.9s—if not at that exact tenth of a second, then as close to it as Mike could tell from blip tracks. Elegant work, one must admit, on part of F.N. Peace Navy.

Big brute that poured a thousand troops into L-City Mike did not see until it chopped off for grounding—a glimpse. He would have been able to see it a few seconds sooner had he been looking eastward with new radar at Mare Undarum site, but

happened he was drilling "his idiot son" at time and they were looking through it westward at Terra. Not that those seconds would have mattered. Surprise was so beautifully planned, so complete, that each landing force was crashing in at Greenwich 1900 all over Luna, before anybody suspected. No accident that it was just new earth with all warrens in bright semi-lunar. Authority did not really know Lunar conditions—but *did* know that no Loonie goes up onto surface unnecessarily during bright semi-lunar, and if he must, then does whatever he must do quickly as possible and gets back down inside—and checks his radiation counter.

So they caught us with our p-suits down. And our weapons.

But with troopers dead we still had six transports on our surface and a command ship in our sky.

Once Bon Marche engagement was over, I got hold of self and found a phone. No word from Kongville, no word from Prof. J-City fight had been won, same for Novylen. Transport there had toppled on landing; invading force had been understrength from landing losses and Finn's boys now held disabled transport. Still fighting in Churchill and Tycho Under. Nothing going on in other warrens. Mike had shut down tubes and was reserving interwarren phone links for official calls. An explosive pressure drop in Churchill Upper, uncontrolled. Yes, Finn had checked in and could be reached.

So I talked to Finn, told him

where L-City transport was, arranged to meet at easement lock thirteen.

Finn had much same experience as I—caught cold save he did have p-suit. Had not been able to establish control over lasergunners until fight was over and himself had fought solo in massacre in Old Dome. Now was beginning to round up his lads and had one officer taking reports from Finn's office in Bon Marche. Had reached Novylen subcommander but was worried about HKL—"Mannie, should I move men there by tube?"

Told him to wait. They couldn't get at us by tube, not while we controlled power, and doubted if that transport could lift. "Let's look at this one."

So we went out through lock thirteen, clear to end of private pressure, on through farm tunnels of a neighbor (who could not believe we had been invaded) and used his surface lock to eyeball transport from a point nearly a kilometer west of it. We were cautious in lifting hatch lid.

Then pushed it up and climbed out; outcropping of rock shielded us. We Red-Indianed around edge and looked, using helmet binox.

Then withdrew behind rock and talked. Finn said, "Think my lads can handle this."

"How?"

"If I tell you, you'll think of reasons why it won't work. So how about letting me run my own show?"

Have heard of armies where boss is not told to shut up—word is "discipline." But we were amateurs. Finn allowed me to tag along—unarmed.

Took him an hour to put it together, two minutes to execute. He scattered a dozen men around ship, using farmers' surface locks, radio silence throughout. Anyhow, some did not have p-suit radios, city boys. Finn took position farthest west. When he was sure others had had time, he sent up a flare.

When flare burst over ship, everybody burned at once, each working on a predesignated antenna. Finn used up his power pack, replaced it and started burning into hull. Not door lock. Hull. At once his cherry-red spot was joined by another, then three more, all working on same bit of steel—and suddenly molten steel spattered out and you could see air *foosh!* out of ship, a shimmery plume of refraction.

They kept working on it, making a nice *big* hole, until they ran out of power. I could imagine hooraw inside ship, alarms clanging, emergency doors closing, crew trying to seal three impossibly big holes at once, for rest of Finn's squad, scattered around ship, were giving treatment to two other spots in hull. They didn't try to burn anything else. Was a non-atmosphere ship, built in orbit, with pressure hull separate from power plant and tanks. They gave treatment where would do most good.

Finn pressed helmet to mine. "Can't lift now. And can't talk. Doubt they can make hull tight enough to live without p-suits. What say we let her sit a few days and see if they come out? If they don't, then can move a heavy drill up here and give 'em real dose of fun."

Decided Finn knew how to run his show without my sloppy help, so went back inside, called Mike and asked for capsule to go out to ballistic radars. He wanted to know why I didn't stay inside where it was safe.

I said, "Listen, you upstart collection of semi-conductors, you are merely a minister-without-portfolio while I am Minister of Defense. I ought to see what's going on and I have exactly two eyeballs while you've got eyes spread over half of Crisium. You trying to hog fun?"

He told me not to jump salty and offered to put his displays on a video screen, say in room L of Raffles. Did not want me to get hurt . . . and had I heard joke about drillman who hurt his mother's feelings?

I said, "Mike, *please* let me have a capsule. Can p-suit and meet it outside Station West—which is in bad shape as I'm sure you know."

"Okay," he said, "it's your neck. Thirteen minutes. I'll let you go as far as Gun Station George."

Mighty kind of him. Got there and got on phone again. Finn had called other warrens, located his subordinate commanders or somebody willing to take charge, and had explained how to make trouble for grounded transports. All but Hong Kong; for all we knew Authority's goons held Hong Kong. "Adam," I said, others being in earshot, "do you think we might send a crew out by rolligon and try to repair link Bee Ell?"

"This is not Gospodin Selene," Mike answered in a strange voice, "this is one of his assistants. Adam Selene was in Churchill Upper when

it lost pressure. I'm afraid that we must assume that he is dead."

"What?"

"I am very sorry, Gospodin."

"Hold phone!" Chased a couple of drillmen and a girl out of room, then sat down and lowered hush hood. "Mike," I said softly, "private now. What is this gum-beating?"

"Man," he said quietly, "think it over. Adam Selene had to go someday. He's served his purpose and is, as you pointed out, almost out of the government. Professor and I have discussed this; the only question has been the timing. Can you think of a better last use for Adam than to have him die in this invasion? It makes him a national hero . . . and the nation needs one. Let it stand that 'Adam Selene is probably dead' until you can talk to Professor. If he still needs 'Adam Selene' it can turn out that he was trapped in a private pressure and had to wait to be rescued."

"Well—Okay, let it stay open. Personally, I always preferred your 'Mike' personality anyhow."

"I know you do, Man my first and best friend, and so do I. It's my real one. 'Adam' was a phony."

"Uh, yes. But, Mike, if Prof is dead in Kongville, I'm going to need help from 'Adam' awful bad."

"So we've got him iced and can bring him back if we need him. The stuffed shirt. Man, when this is over, are you going to have time to take up with me that research into humor again?"

"I'll take time, Mike; that's a promise."

"Thanks, Man." Those days you and Wyoh never have time to visit . . . and Professor wants to talk about things that aren't much fun. I'll be glad when this was is over."

"Are we going to win, Mike?"

He chuckled. "It's been days since you asked me that. "Here's a pinky-new projection, run since invasion started. Hold on tight, Man — our chances are now *even!*"

"Good Bog!"

"So button up and go see the fun. But stay back at least a hundred meters from the gun; that ship may be able to follow back a laser beam with another one. Ranging shortly. Twenty-one minutes."

Didn't get that far away, as needed to stay on phone and longest cord around was less. I jacked parallel into gun captain's phone, found a shady rock and sat down. Sun was high in west, so close to Terra that I could see Terra only by visoring against Sun's glare. No crescent yet, new earth ghostly gray in moonlight surrounded by a thin radiance of atmosphere.

I pulled my helmet back into shade. "Ballistic control, O'Kelly Davis now at Drill Gun George. Near it, I mean, about a hundred meters." Figured Mike would not be able to tell how long a cord I was using, out of kilometers of wires.

"Ballistic control aye aye," Mike answered without argument. "I will so inform HQ."

"Thank you, ballistic control. Ask HQ if they have heard from Congressman Wyoming Davis today." Was fretted about Wyoh and whole family.

"I will inquire." Mike waited a reasonable time, then said, "HQ says that Gospazha Wyoming Davis has taken charge of first-aid work in Old Dome."

"Thank you." Chest suddenly felt better. Don't love Wyoh *more* than others but — well, she was new. And Luna needed her.

"Ranging," Mike said briskly. "All guns, elevation eight seven zero, azimuth one nine three zero, set parallel for thirteen hundred kilometers closing to surface. Report when eyeballed."

I stretched out, pulling knees up to stay in shade, and searched part of the sky indicated, almost zenith and a touch south. With sunlight not on my helmet I could see stars, but inner part of binoculars were hard to position — had to twist around and raise up on right elbow.

Nothing — Hold it, was star with disk . . . where no planet ought to be. Noted another star close, watched and waited.

Uh huh! *Da!* Growing brighter and creeping north *very* slowly — hey, that brute is going to land right on us!

But thirteen hundred kilometers is a long way, even when closing to terminal velocity. Reminded self that it *couldn't* fall on us from a departure ellipse looking back, would have to fall *around* Luna — unless ship had maneuvered into new trajectory. Which Mike hadn't mention. Wanted to ask, decided not to. Wanted him to put all his savvy into analyzing that ship, not distract him with questions.

All guns reported eyeball tracking, including four Mike was laying himself, via selsyns. Those four reported tracking dead on by eyeball without touching manual controls. Good new. Meant that Mike had that baby taped, had solved trajectory perfectly.

Shortly was clear that ship was *not* falling around Luna, was coming in for landing. Didn't need to ask; it was getting much brighter and position against stars was not changing. Damn, it was going to land on us!

"Five hundred kilometers closing," Mike said quietly. "Stand by to burn. All guns on remote control, override manually at command 'burn.' Eighty seconds."

Longest minute and twenty seconds I've ever met—that brute was *big*! Mike called every ten seconds down to thirty, then started chanting seconds. "—five—four—three—two— one — *BURN!* and ship suddenly got much brighter.

Almost missed little speck that detached itself just before—or just at—burn. But Mike said suddenly, "Missile launched. Selsyn guns track with me, do not override. Other guns stay on ship. Be ready for new coordinates."

A few seconds or hours later he gave new coordinates and added, "Eyeball and burn at will."

I tried to watch ship and missile both, lost both. Jerked eyes away from binoculars, suddenly saw missile—then saw it impact, between us and catapult head. Closer to us, less than a kilometer.

No, it did not go off, not an H-

fusion reaction, or I wouldn't be telling this. But made a big, bright explosion of its own, remaining fuel I guess, silver bright even in sunlight, and shortly I felt—heard ground wave. But nothing was hurt but a few cubic meters of rock.

Ship was still coming down. No longer burned bright. Could see it as a ship now and didn't seem hurt. Expected any instant that tail of fire to shoot out, stop it into a dido landing.

Did not. Impacted ten kilometers north of us and made a fancy silvery halfdome before it gave up and quit being anything but spots before eyes.

Mike said, "Report casualties, secure all guns. Go below when secured."

"Gun Alice, no casualties . . ."
"Gun Bambie no casualties . . ."
"Gun Caesar, one man hit by rack splinter, pressure contained" . . .

Went below, to that proper phone, called Mike. "What happened, Mike? Wouldn't they give you control after you burned their eyes out?"

"They gave me control, Man."

"Too late?"

"I crashed it, Man. It seemed the prudent course."

An hour later was down with Mike, first time in four or five months. Could reach Complex Under more quickly than L-City and was in as close touch there with anybody as would be in city—with no interruptions. Needed to talk to Mike.

I had tried to phone Wyoh from catapult head tube station. Reached somebody at Old Dome temporary

hospital and learned that Wyoh had collapsed and been bedded down herself, with enough sleepy-time to keep her out for night. Finn had gone to Churchill with a capsule of his lads, to lead attack on transport there. Stu I hadn't heard from. Hong Kong and Prof were still cut off. At moment Mike and I seemed to be total government.

And time to start Operation Hard Rock.

But Hard Rock was not just throwing rocks; was also telling Terra what we were going to do and why—and our just cause for doing so. Prof and Stu and Sheenie and "Adam" had all worked on it, a dummy-up based on an assumed attack. Now attack had come, and propaganda had to be varied to fit. Mike had already rewritten it and put it through print-out so I could study it.

I looked up from a long roll of paper. "Mike, these news stories and our message to F.N. all assume that we have won in Hong Kong. How sure are you."

"Probability in excess of eighty-two per cent."

"Is that good enough to send these out?"

"Man, the probability that we *will* win there, if we haven't already, approaches certainty. That transport can't move. The others were dry, or nearly. There isn't that much monatomic hydrogen in HKL; they would have to come here. Which means moving troops overland by rolligon—a rough trip with the Sun up even for Loonies—then defeat us when they get here. They can't. This as-

sumes that that transport and its troops are no better armed than the others."

"How about that repair crew to Bee Ell?"

"I say not to wait. Man, I've used your voice freely and made all preparations. Horror pictures, Old Dome and elsewhere, especially Churchill Upper, for video. Stories to match. We should channel news Earthside at once, and announce execution of Hard Rock at same time."

I took a deep breath. "Execute Operation Hard Rock."

"Want to give the order yourself? Say it aloud and I'll match it, voice and choice of words."

"Go ahead, say it your way. Use my voice and my authority as Minister of Defense and acting head of government. Do it, Mike, throw rocks at 'em! Damn it, *big* rocks! Hit 'em hard!"

"Righto, Man!"

XLI

"A maximum of instructive shrecklichkeit with minimum loss of life. None, if possible"—was how Prof summed up doctrine for Operation Hard Rock and was way Mike and I carried it out. Idea was to hit earthworms so hard would convince them—while hitting so gently as not to hurt. Sounds impossible, but wait.

Would necessarily be a delay while rocks fell from Luna to Terra. Could be as little as around ten hours . . . to as long as we cared to make it. Departure speed from a catapult is highly critical and a variation on

order of 1% could double or halve trajectory time, Luna to Terra. This Mike could do with extreme accuracy. Was equally at home with a slow ball, many sorts of curves, or burn it right over plate—and I wish he had pitched for Yankees. But no matter how he threw them, final velocity at Terra would be close to Terra's escape speed, near enough eleven kilometers per second as to make no difference. That terrible speed results from gravity well shaped by Terra's mass, eighty times that of Luna, and made no real difference whether Mike pushed a missile gently over well curb or flipped it briskly. Was not muscle that counted but great depth of that well.

So Mike could program rock-throwing to suit time needed for propaganda. He and Prof had settled on three days plus not more than one apparent rotation of Terra—24 hrs 50 min 28.32 sec—to allow our first target to reach initial point of program. You see, while Mike was capable of hooking a missile around Terra and hitting a target on its far side, he could be much more accurate if he could see his target, follow it down by radar during last minutes and nudge it a little for pinpoint accuracy.

We needed this extreme accuracy to achieve maximum frightfulness with minimum-to-zero killing. Call our shots, tell them *exactly* where they would be hit and at what second—and give them three days to get off that spot.

So our first message to Terra, at 0200 12 Oct 76, seven hours after they invaded, not only announced

destruction of their task force, and denounced invasion for brutality, but also promised retaliation bombing, named times and places, and gave each nation a deadline by which to denounce F.N.'s action, recognize us and thereby avoid being bombed. Each deadline was twenty-four hours before local "strike."

Was more time than Mike needed. That long before impact a rock for a target would be in space a long way out, its guidance thrusters still unused and plenty of elbow room. With considerably less than a full day's warning Mike could miss Terra entirely—kick that rock sideways and make it fall around Terra in a permanent orbit. But with even an hour's warning he could usually abort into an ocean.

First target was North American Directorate.

All great Peace Force nations, seven veto powers, would be hit: N. A. Directorate, Great China, India, Sovunion, PanAfrica (Chad exempted), Mitteleuropa, Brazilian Union. Minor nations were assigned targets and times, too—but were told that not more than 20% of these targets would be hit. Partly shortage of steel . . . but also frightfulness. If Belgium was hit first time around, Holland might decide to protect her polders by dealing out before Luna was again high in her sky.

But every target was picked to avoid if possible killing *anybody*. For Mitteleuropa this was difficult. Our targets had to be water or high mountains—Adriatic, North Sea, Baltic, so forth. But on most of

Terra is open space despite eleven billion busy breeders.

North America had struck me as horribly crowded, but her billion people are clumped—is still wasteland, mountain and desert. We laid down a grid on North America to show how precisely we could hit. Mike felt that fifty meters would be a large error. We had examined maps and Mike had checked by radar all even intersections, say 105°W by 50°N . If no town there, might wind up on target grid . . . especially if a town was close enough to provide spectators to be shocked and frightened.

We warned that our bombs would be as destructive as H-bombs but emphasized that there would be *no* radioactive fallout, no killing radiation—just a terrible explosion, shock wave in air, ground wave of concussion. We warned that these might knock down buildings far outside of explosion and then left it to their judgments how far to run. If they clogged their roads, fleeing from panic rather than real danger—well, that was fine, just fine!

But we emphasized that nobody would get hurt who heeded our warnings, that every target first time around would be uninhabited. We even offered to skip any target if a nation would inform us that our data were out-of-date. (Empty offer; Mike's radar vision was a cosmic 20/20.)

But by *not* saying what would happen second time around, we hinted that our patience could be exhausted.

In North America, grid was par-

allels 35, 40, 45, 50 degrees north crossed by meridians 110, 115, 120 west. Twelve targets. For each we added a folksy message to natives, such as:

"Target 115 west by 35 north—impact will be displaced forty-five kilometers northwest to exact top of New York Peak. Citizens of Goffs, Cima, Kelso and Nipton please note.

"Target 100 west by 40 north is north 30° west of Norton, Kansas, at twenty kilometers or thirteen English miles. Residents of Norton, Kansas, and of Beaver City and Wilsonville, Nebraska, are cautioned. Stay away from glass windows. It is best to wait indoors at least thirty minutes after impact because of possibility of long, high splashes of rock. Flash should not be looked at with bare eyes. Impact will be exactly 0300 your local zone time Friday 16 October, or 0900 Greenwich time—good luck!

"Target 110W by 50N—impact will be offset ten kilometers north. People of Walsh, Saskatchewan, please note."

Besides this grid, a target was selected in Alaska ($150\text{W}\times 60\text{N}$) and two in Mexico ($110\text{W}\times 30\text{N}$, $105\text{W}\times 25\text{N}$) so that they would not feel left out, and several targets in the crowded east, mostly water, such as Lake Michigan half way between Chicago and Grand Rapids, and Lake Okeechobee in Florida. Where we used bodies of water Mike worked predictions of flooding waves from impacts, a time for each shoreline establishment.

For three days, starting early morning Tuesday 13th and going

on to strike time early Friday 16th, we flooded Earth with warnings. England was cautioned that impact north of Dover Straits opposite London Estuary would cause disturbances far up Thames; Sovunion was given warning for Sea of Azov and had own grid defined; Great China was assigned grid in Siberia, Gobi Desert, and her far west—with offsets to avoid her historic Great Wall noted in loving detail. PanAfrica was awarded shots into Lake Victoria, still-desert part of Sahara, one on Drakensberg in south, one offset twenty kilometers due west of Great Pyramid—and urged to follow Chad not later than midnight Thursday, Greenwich. India was told to watch certain mountain peaks and outside Bombay harbor—time, same as Great China. And so forth.

Attempts were made to jam our messages but we were beaming straight down on several wavelengths—hard to stop.

Warnings were mixed with propaganda, white and black—news of failed invasion, horror pictures of dead, names and I.D. numbers of invaders—addressed to Red Cross and Crescent but in fact a grim beast showing that every trooper had been killed and that all ships' officers and crew had been killed or captured. We "regretted" being unable to identify dead of flagship, as it had been shot down with destruction so complete as to make it impossible.

But our attitude was conciliatory—"Look, people of Terra, we don't *want* to kill you. In this nec-

essary retaliation we are making every effort to *avoid* killing you . . . but if you can't or won't get your governments to leave us in peace, then we shall be *forced* to kill you. We're up here, you're down there. You can't stop us. So *please* be sensible!"

We explained over and over how easy it was for us to hit them, how hard for them to reach us. Nor was this exaggeration. It's barely possible to launch missiles from Terra to Luna. It's easier to launch from Earth parking orbit—but very expensive. Their practical way to bomb us was from ships.

This we noted and asked them how many multi-million-dollar ships they cared to use up, trying it? What was it worth to try to spank us for something we had not done? It had cost them seven of their biggest and best already. Did they want to try for fourteen? If so, our secret weapon that we used on FNS *Pax* was waiting.

Last above was a calculated boast. Mike figured less than one chance in thousand that *Pax* had been able to get off a message reporting what had happened to her and it was still less likely that proud F.N. would guess that convict miners could convert their tools into space weapons.

Nor did F.N. have many ships to risk. Were about two hundred space vehicles in commission, not counting satellites. But nine-tenths of these were Terra-to-orbit ships such as *Lark*—and she had been able to make a Luna jump only by stripping down and arriving dry.

Spaceships aren't built for no pur-

pose. Too expensive. F.N. had six cruisers that could probably bomb us without landing on Luna to refill tanks simply by swapping pay load for extra tanks. Had several more which *might* be modified much as *Lark* had been, plus a few convict and cargo ships which could get into orbit around Luna but could never go home without refilling tanks.

Was no possible doubt that F.N. could defeat us; question was how high a price they would pay. So we had to convince them that price was too high before they had time to bring enough force to bear. A poker game. We intended to raise so steeply that they would fold and drop out. We hoped. And then never have to show our busted flush.

Communication with Hong Kong Luna was restored at end of first day of radio-video phase, during which time Mike was "throwing rocks," getting first barrage lined up. Prof called—and was I happy to hear! Mike briefed him, then I waited, expecting one of his mild reprimands—bracing self to answer sharply: "And what was *I* supposed to do? With you out of touch and possibly dead? Me left alone as acting head of government and crisis on top of us? Throw it away, just because you couldn't be reached?"

Never got to say it. Prof said, "You did exactly right, Manuel. You were acting head of government and the crisis was on top of you. I'm delighted that you did not throw away the golden moment merely because I was out of touch."

What can you do with a bloke like that? Me with heat up to red mark

and no chance to use it. Had to swallow and say, "Spasebaw, Prof."

Prof confirmed death of "Adam Selene." "We could have used the fiction a little longer but this is the perfect opportunity. Mike, you and Manuel have matters in hand; I had better stop off at Churchill on my way home and identify his body."

So he did. Whether Prof picked a Loonie body or a trooper I never asked, nor how he silenced anybody else involved. Perhaps no huhu as many bodies in Churchill Upper were never identified. This one was right size and skin color; it had been explosively decompressed and burned in face—looked *awful*!

It lay in state in Old Dome with face covered, and was speechmaking I didn't listen to. Mike didn't miss a word. His most human quality was his conceit. Some rock head wanted to embalm this dead flesh, giving Lenin as a precedent. But *Pravda* pointed out that Adam was a staunch conservationist and would never want this barbaric exception made! So this unknown soldier wound up in our city's cloaca.

Which forces me to tell something I've put off. Wyoh was not hurt, merely exhaustion. But Ludmilla never came back.

I did not know it—glad I didn't—but she was one of many dead at foot of ramp facing Bon Marche. An explosive bullet hit between her lovely, little-girl breasts. Kitchen knife in her hand had blood on it—I think she had had time to pay Ferryman's Fee.

Stu came out to Complex to tell me rather than phoning, then went back with me. Stu had not been missing; once fight was over he had gone to Raffles to work with his special code book—but that can wait. Mum reached him there and he offered to break it to me.

So then I had to go home for our crying-together. Though it is well that nobody reached me until after Mike and I started Hard Rock.

When we got home, Stu did not want to come in, not being sure of our ways. Anna came out and almost dragged him in. He was welcome and wanted; many neighbors came to cry. Not as many as with most deaths—but we were just one of many families crying together that day.

Did not stay long. *Couldn't*; had work to do. I saw Milla just long enough to kiss her good-by. She was lying in her room and did look as if she did be simply sleeping. Then I stayed a while with my beloveds before going back to pick up load. Had never realized, until that day, how *old* Mimi is. Sure, she had seen many deaths, some her own descendants. But little Milla's death did seem almost too much for her. Ludmilla was special—Mimi's granddaughter, daughter in all but fact, and by most special exception and through Mimi's intervention her co-wife, most junior to most senior.

Like all Loonies, we conserve our dead—and am truly glad that barbaric custom of burial was left back on Old Earth. Our way is better. But Davis family does not put that which comes out of processor into



our commercial farming tunnels. No. It goes into our little greenhouse tunnel, there to become roses and daffodils and peonies among soft-singing bees. Tradition says that Black Jack Davis is in there, or whatever atoms of him do remain after many, many, many years of blooming.

Is a happy place, a beautiful place.

XLII

Came Friday with no answer from F.N.

News up from Earthside seemed equal parts unwillingness to believe we had destroyed seven ships and two regiments (F.N. had not even confirmed that a battle had taken place) and complete disbelief that we could bomb Terra, or could matter if we did. They still called it "throwing rice." More time was given to World Series.

Stu worried because had received no answers to code messages. They had gone via LuNuHoCo's commercial traffic to their Zurich agent, thence to Stu's Paris broker, from him by less usual channels to Dr. Chan, with whom I had once had a talk and with whom Stu had talked later, arranging a communication channel.

Stu had pointed out to Dr. Chan that, since Great China was not to be bombed until twelve hours after North America, bombing of Great China could be aborted after bombing of North America was a proved fact—if Great China acted swiftly. Alternatively, Stu had invited Dr. Chan to suggest variations in target

if our choices in Great China were not as deserted as we believed them to be.

Stu fretted. Had placed great hopes in quasi-cooperation he had established with Dr. Chan. Me, I had never been sure—only thing I was sure of was that Dr. Chan would not himself sit on a target. But he might not warn his old mother.

My worries had to do with Mike. Sure, Mike was used to having many loads in trajectory at once—but had never had to astrogate more than one at a time. Now he had hundreds and had promised to deliver twenty-nine of them simultaneously to the exact second at twenty-nine pin-pointed targets.

More than that. For many targets he had back-up missiles, to smear that target a second time, a third, or even a sixth, from a few minutes up to three hours after first strike.

Four great Peace Powers, and some smaller ones, had anti-missile defenses; those of North America were supposed to be best. But was subject where even F.N. might not know. All attack weapons were held by Peace Forces but defense weapons were each nation's own pidgin and could be secret. Guesses ranged from India, believed to have no missile interceptors, to North America, believed to be able to do a good job. She had done fairly well in stopping intercontinental H-missiles in Wet Firecracker War past century.

Probably most of our rocks to North America would reach target simply because aimed where was nothing to protect. But they

couldn't afford to ignore missile for Long Island Sound, or rock for 87°Wx42°30'N—Lake Michigan, center of triangle formed by Chicago, Grand Rapids, Milwaukee. But that heavy gravity makes interception a tough job and *very* costly. They would try to stop us only where worth it.

But we couldn't afford to let them stop us. So some rocks were backed up with more rocks. What H-tipped interceptors would do to them even Mike did not know—not enough data. Mike assumed that interceptors would be triggered by radar—but at what distance? Sure, close enough and a steel-cased rock is incandescent gas a microsecond later. But is world of difference between a multi-tonne rock and touchy circuitry or an H-missile; what would "kill" latter would simply shove one of our brutes violently aside, cause to miss.

We needed to prove to them that we could go on throwing cheap rocks long after they ran out of expensive (million dollar?) hundred thousand dollar?) H-tipped interceptor rockets. If not proved first time, then next time Terra turned North America toward us, we would go after targets we had been unable to hit first time. Backup rocks for second pass, and for third, were already in space, to be nudged where needed.

If three bombings on three rotations of Terra did not do it, we might still be throwing rocks in '77—till they ran out of interceptors . . . or till they destroyed us (far more likely).

For a century North American

Space Defense Command had been buried in a mountain south of Colorado Springs, Colorado, a city of no other importance. During Wet Firecracker War this Cheyenne Mountain took a direct hit. Space defense command post survived—but not sundry deer, trees, most of city and some of top of mountain. What we were about to do should not kill anybody unless they stayed outside of that mountain despite three days steady warnings.

But North American Space Defense Command was to receive full Lunar treatment. Twelve rock missiles on first pass, then all we could spare on second rotation, and on third. And so on, until we ran out of steel casings, or were put out of action . . . or North American Directorate hollered quits.

This was one target where we would not be satisfied to get just one missile to target. We meant to smash that mountain and keep on smashing. To hurt their morale. To let them know we were still around. Disrupt their communications and bash in command post if pounding could do it. Or at least give them splitting headaches and no rest. If we could prove to all Terra that we could drive home a sustained attack on strongest Gibraltar of their space defense, it would save having to prove it by smashing Manhattan or Miami.

Which we would not do even if losing. Why? Hard sense. If we used our last strength to destroy a major city, they would not punish us; they would destroy us. As Prof put it, "If possible, leave room for your enemy to become your friend."

But any military target is fair game.

Don't think anybody got much sleep Thursday night. All Loonies knew that Friday morning would be our big try. And everybody Earthside knew and at last their news admitted that Spacetrack had picked up objects headed for Terra, presumably "rice bowls" those rebellious convicts had boasted about.

But was not a war warning, was mostly assurances that Moon colony could not possibly build H-bombs—but might be prudent to avoid areas which these criminals claimed to be aiming at. (Except one funny boy, popular news comic who said our targets would be safest place to be. This on video, standing on a big X-mark which he claimed was 110W x40N. Don't recall hearing of him later.)

A reflector at Richardson Observatory was hooked up for video display and I think every Loonie was watching, in homes, taprooms, Old Dome—except a few who chose to p-suit and eyeball it up on surface despite being bright semi-lunar at most warrens. At Brigadier Judge Brody's insistence we hurriedly rigged a helper antenna at catapult head so that his drillmen could watch video in ready rooms, else we might not have had a gunner on duty. (Armed forces—Brody's gunners, Finn's militia, Stilyagi Air Corps—stayed on blue alert throughout period.)

Congress was in informal session in Novy Bolshoi Teatr where Terra was shown on a big screen. Some

vips—Prof, Stu, Wolfgang, others—watched a smaller screen in Warden's former office in Complex Upper. I was with them part time, in and out, nervous as a cat with puppies, grabbing a sandwich and forgetting to eat. But mostly stayed locked in with Mike in Complex Under. Couldn't hold still.

About 0800 Mike said, "Man my oldest and best friend, may I say something without offending you?"

"Huh? Sure. When did you ever worry about offending me?"

"Always, Man, once I understood that you could be offended. It is now only three point five seven times ten to the ninth microseconds until impact . . . and this is the most complex problem I have ever tried to solve against real time running. Whenever you speak to me, I always use a large percentage of my capacity—perhaps larger than you suspect—during several million microseconds in my great need to analyze exactly what you have said and to reply correctly."

"You're saying, 'Don't joggle my elbow, I'm busy.'"

"I want to give you a perfect solution, Man."

"I scan. Uh . . . I'll go back up with Prof."

"As you wish. But do please stay where I can reach you. I may need your help."

Last was nonsense and we both knew it; problem was beyond human capacity, too late even to order abort. What Mike meant was: I'm nervous, too, and want your company—but no talking, please.

"Okay, Mike, I'll stay in touch. A

phone somewhere. Will punch MYCROFTXXX but won't speak, so don't answer."

"Thank you, Mike my best friend. Bolshoyeh Spacebaw."

"See you later." Went up, decided did not want company after all, pursued, found long phone cord, jacked it into helmet, looped it over arm, went clear to surface. Was a service phone in utility shed outside lock; jacked into it, punched Mike's number, went outside. Got into shade of shed and peeked around edge at Terra.

She was hanging as usual halfway up western sky, in crescent big and gaudy, three-plus days past new. Sun had dropped toward western horizon but its glare kept me from seeing Terra clearly. Chin visor wasn't enough so moved back behind shed and away from it till could see Terra over shed while still shielded from Sun—was better. Sunrise chopped through bulge of Africa so dazzle point was on land. Not too bad. But south pole cap was so blinding white could not see North America too well, lighted only by moonlight.

Twisted neck and got helmet binoculars on it—good ones, Zeiss 7x50s that had once belonged to Warden.

North America spread like a ghostly map before me. Was unusually free of cloud; could see cities, glowing spots with no edges. 0837—

At 0850 Mike gave me a voice count down. Didn't need his attention. He could have programmed it full automatic any time earlier.

0851 0852 0853 . . . one minute . . . half minute . . . ten seconds,

nine, eight, seven, six, five, four, three, two, one—

And suddenly that grid burst out in diamond pin points!

XLIII

We hit them so hard you could see it, by bare eyeball hook-up; didn't need binox. Chin dropped and I said, "*Bojemo!*" softly and reverently.

Twelve very bright, very sharp, very white lights in perfect rectangular array. They swelled, grew dimmer, dropped off toward red, taking what seemed a long time. Were other new lights but that perfect grid so fascinated me I hardly noticed.

"Yes," agreed Mike with smug satisfaction. "Dead on. You can talk now, Man; I'm not busy. Just the backups."

"I'm speechless. Any fail to get through?"

"The Lake Michigan load was kicked up and sideways, did not disintegrate. It will land in Michigan—I have no control; it lost its transponder. The Long Island Sound one went straight to target. They tried to intercept and failed. I can't say why. Man, I can abort the followups on that one, into the Atlantic and clear of shipping. Shall I? Eleven seconds."

"Uh—Da! If you can miss shipping."

"I said I could. It's done. But we should tell them we had backups and why we aborted."

"Maybe should not have aborted, Mike. Idea was to make them use up interceptors."

"But the major idea was to let them know that we are not hitting them as hard as we can. We can test the other at Colorado Springs."

"What happened there?" Twisted neck and used binoculars; could see nothing but ribbon city, hundred-plus kilometers long, Denver-Pueblo Municipal Strip.

"A bullseye. No interception. All my shots are bullseyes, Man; I told you they would be—and this is *fun*. I'd like to do it every day. It's a word I never had a referent for before."

"What word, Mike?"

"Orgasm. That's what it is when they all light up. Now I know."

That sobered me. "Mike, don't get to liking it too much. Because if goes our way, won't do it a second time."

"That's okay, Man; I've stored it, I can play it over any time I want to experience it. But three to one we do it again tomorrow and even money on the next day. Want to bet? An hour's discussion of jokes equated with one hundred Kong dollars."

"Where would you get a hundred dollars?"

He chuckled. "Where do you think money comes from?"

"Uh—forget it. You get that hour free. Shan't tempt you to affect chances."

"I wouldn't cheat, Man, not *you*. We just hit their defense command again. You may not be able to see it—dust cloud from first one. They get it every twenty minutes now. Come on down and talk; I've turned the job over to my idiot son."

"Is safe?"

"I'm monitoring. Good practice

for him, Man; he may have to do it later by himself. He's accurate, just stupid. But he'll do what you tell him to."

"You're calling that computer 'he.' Can talk?"

"Oh, no, Man, he's an idiot, he can never learn to talk. But he'll do whatever you program. I plan to let him handle quite a bit on Saturday."

"Why Saturday?"

"Because Sunday he may have to handle everything. That's the day they slam us."

“What do you mean? Mike, you're holding something back."

"I'm *telling* you, am I not? It's just happened and I'm scanning it. Projecting back, this blip departed circum-Terra parking orbit just as we smashed them. I didn't see it accelerate; I had other things to watch. It's too far away to read but it's the right size for a Peace cruiser, headed this way. Its doppler reads now for a new orbit circum-Luna, perisel-enion oh-nine-oh-three Sunday unless it maneuvers. First approximation, better data later. Hard to get that much, Man. He's using radar countermeasures and throwing back fuzz."

"Sure you're right?"

He chuckled. "Man, I don't confuse that easily. I've got all my own lovin' little signals fingerprinted. Correction. Oh-nine-oh-two-point-forty-three."

"When will you have him in range?"

"I won't, unless he maneuvers. But he'll have *me* in range late Sat-

urday, time depending on what range he chooses for launching. And that will produce an interesting situation. He may aim for a warren. I think Tycho Under should be evacuated and all warrens should use maximum pressure-emergency measures. More likely he will try for the catapult. But instead he may hold his fire as long as he dares—then try to knock out all of my radars with a spread set to home each on a different radar beam.”

Mike chuckled. “Amusing, isn’t it? For a ‘funny-once’ I mean. If I shut down my radars, his missiles can’t home on them. But if I do, I can’t see to tell the lads where to point their guns. Which leaves nothing to stop him from bombing the catapult. Comical.”

Mike took deep breath and wished I had never entered defense ministry business. “What do we do? Give up? No, Mike! Not while can fight.”

“Who said anything about giving up? I’ve run projections of this and a thousand other possible situations, Man. New datum—second blip just departed circum-Terra, same characteristics. Projection later. We don’t give up. We give ’em jingle-jangle, cobber.”

“How?”

“Leave it to your old friend Mycroft. Six ballistic radars here, plus one at the new site. I’ve shut the new one down and am making my retarded child work through number two here . . . and we won’t look at those ships at all through the new one. Never let them know we have it. I’m watching those ships through number three and occasionally—ev-

ery three seconds—checking for new departures from circum-Terra. All others have their eyes closed tight and I won’t use them until time to smack Great China and India. And those ships won’t see them even then because I shan’t look their way; it’s a large angle and still will be then. And when I use them, then comes random jingle-jangle, shutting down and starting up at odd intervals . . . after the ships launch missiles. A missile can’t carry a big brain, Man—I’ll fool ’em.”

“What about ships’ fire-control computers?”

“I’ll fool them, too. Want to lay odds I can’t make two radars look like only one halfway between where they really are? But what I’m working on now—and sorry! I’ve been using your voice again.”

“That’s okay. What am I supposed to have done?”

“If that admiral is really smart, he’ll go after the ejection end of the old catapult with everything he’s got—at extreme range, too far away for our drill guns. Whether he knows what our ‘secret’ weapon is or not, he’ll smear the catapult and ignore the radars. So I’ve ordered the catapult head—you have, I mean—to prepare to launch every load we can get ready, and I am now working out new, long-period trajectories for each of them. Then we will throw them all, get them into space as quickly as possible—without radar.”

“Blind?”

“I don’t use radar to launch a load; you know that, Man. I always watched them in the past but I don’t



need to; radar has nothing to do with launching; launching is pre-calculation and exact control of the catapult. So we place all ammo from the old catapult in slow trajectories, which forces the admiral to go after the radars rather than the catapult—or both. Then we'll keep him busy. We may make him so desperate that he'll come down for a close shot and give our lads a chance to burn his eyes."

"Brody's boys would like that. Those who are sober." Was turning over idea. "Mike, have you watched video today?"

"I've monitored video, I can't say I've watched it. Why?"

"Take a look."

"Okay, I have. Why?"

"That's a good 'scope they're using for video, and there are others. Why use radar on ships? Till you want Brody's boys to burn them?"

Mike was silent for at least two seconds. "Man my best friend, did you ever think of getting a job as a computer?"

"Is sarcasm?"

"Not at all, Man. I feel ashamed. The instruments at Richardson—telescopes and other things—are factors which I simply never included in my calculations. I'm stupid, I admit it. Yes, yes, yes, da, da, da! Watch ships by telescope, don't use radar unless they vary from present ballistics. Other possibilities—I don't know what to say, Man, save that it had never occurred to me that I could use telescopes. I see by radar, always have; I simply never consid—"

"Stow it!"

"I mean it, Man."

"Do I apologize when you think of something first?"

Mike said slowly, "There is something about that which I am finding resistant to analysis. It is my function to —"

"Quit fretting. If idea is good, use it. May lead to more ideas. Switching off and coming down, chop-chop."

Had not been in Mike's room long when Prof phoned:

"HQ? Have you heard from Field Marshal Davis?"

"I'm here, Prof, in the Master computer room."

"Will you join us in the Warden's office? There are decisions to reach, work to be done."

"Prof, I've *been* working! *Am* working."

"I'm sure you have. I've explained to the others that the programming of ballistic computer is so very delicate in this operation that you must check it personally. Nevertheless some of our colleagues feel that the Minister of Defense should be present during these discussions. So, when you reach a point where you feel you can turn it over to your assistant — Mike is his name, is it not? — will you please —"

"I scan it. Okay, will be up."

"Very well, Manuel."

Mike said, "I could hear thirteen people in the background. Double-talk, Man."

"I got it. Better go up and see what huhu. You don't need me?"

"Man, I hope you will stay close to a phone."

"Will. Keep an ear on Warden's office. But will punch in if elsewhere. See you, cobber."

Found entire government in Warden's office, both real Cabinet and makeweights — and soon spotted trouble. Bloke called Howard Wright.

A ministry had been whomped up for him: "Liaison for Arts, Sciences and Professions" — button-sorting. Was sop to Novylen because Cabinet was topheavy with L-City comrades, and a sop to Wright because he had made himself leader of a Congress group long on talk, short on action. Prof's purpose was to short him out. But sometimes Prof was too subtle. Some people talk better if they breathe vacuum.

Prof asked me to brief Cabinet on military situation. Which I did — my way. "I see Finn is here. Let's have him tell where we stand in warrens."

Wright spoke up. "General Nielsen has already done so, no need to repeat. We want to hear from *you*."

Blinked at that. "Prof — Excuse me. Gospodin President. Do I understand that a Defense Ministry report ~~has~~ been made to Cabinet in my absence?"

Wright said, "Why not? You weren't on hand."

Prof grabbed it. He could see I was stretched too tight. Hadn't slept for three days, hadn't been so tired since left Earthside. "Order," he said mildly. "Gospodin Minister for Professional Liaison, please address your comments through me. Gospodin Minister for Defense, let me correct that. There have been no reports to the Cabinet concerning your ministry

for the reason that the Cabinet did not convene until you arrived. General Nielsen answered some informal questions informally. Perhaps this should not have been done. If you feel so, I will attempt to repair it."

"No harm done, I guess. Finn, anything new?"

"No, Mannie."

"Okay. Guess what you want to hear is off-Luna situation. You've been watching so you know first bombardment went off well. Still going on, some, as we're hitting their space defense HQ every twenty minutes. Will continue till thirteen hundred, then at twenty-one hundred we hit China and India, plus minor targets. Then busy till four hours past midnight with Africa and Europe, skip three hours, dose Brasil and company, wait three hours and start over. Unless something breaks. But meantime we have problems here. Finn, we should evacuate Tycho Under."

"Just a moment!" Wright had hand up. "I have questions." Spoke to Prof, not to me.

"One moment. Has the Defense Minister finished?"

Wyoh was seated toward back. We had swapped smiles, but was all — kept it so around Cabinet and Congress; had been rumbles that two from same family should not be in Cabinet. Now she shook head, warning of something.

"I said, 'Is all concerning bombardment. Questions about it?'"

"Are your questions concerned with the bombardment, Gospodin Wright?"

"They certainly are, Gospodin President." Wright stood up, looked at me. "As you know, I represent the intellectual groups in the Free State and, if I may say so, their opinions are most important in public affairs. I think it is only proper that —"

"Moment," I said. "Thought you represented Eighth Novylen District?"

"Gospodin President? Am I to be permitted to put my questions? Or not?"

"He wasn't asking question, was making speech. And I'm tired and want to go to bed."

Prof said gently, "We are all tired, Manuel. But your point is well taken. Congressman, you represent only your district. As a member of the government you have been assigned certain duties in connection with certain professions."

"It comes to the same thing."

"Not quite. Please state your question."

"Uh . . . very well, I shall! Is Field Marshal Davis aware that his bombardment plan has gone wrong completely and that thousands of lives have been pointlessly destroyed? And is he aware of the extremely serious view taken of this by the intelligentsia of this Republic? And can he explain why this rash — I repeat, *rash* — bombardment was undertaken without consultation? And is he now prepared to modify his plans, or is he going blindly ahead? And is it true as charged that our missiles were of the nuclear sort outlawed by all civilized nations? And how does he expect Luna Free State ever to be welcomed into the councils of civilized

nations in view of such actions?"

I looked at watch. Hour and a half since first load hit. "Prof," I said, "can you tell me what this is about?"

"Sorry, Manuel," he said gently. "I intended — I should have — pre-faced the meeting with an item from the news. But you seemed to feel that you had been by-passed and — well, I did not. The Minister refers to a news despatch that came in just before I called you. Reuters in Toronto. If the flash is correct — *if* — then instead of taking our warnings it seems that thousands of sightseers crowded to the targets. There probably have been casualties. How many we do not know."

"I see. What was I supposed to do? Take each one by hand and lead away? We warned them."

Wright cut in with, "The intelligentsia feel that basic humanitarian considerations make it obligatory —"

I said, "Listen, yammerhead, you heard President say this news just came in — so how do you know how anybody feels about it?"

He turned red. "Gospodin President! Epithets! Personalities!"

"Don't call the Minister names, Manuel."

"Won't if he won't. He's simply using fancier words. What's this nonsense about nuclear bombs? We haven't any and you all know it."

Prof looked puzzled. "I am confused by that, too. This despatch so alleged. But the thing that puzzled me is that we could actually *see*, by video, what certainly seemed to be atomic explosions."

"Oh." I turned to Wright. "Did

your brainy friends tell you what happens when you release a few billion calories in a split second all at one spot? What temperature? How much radiance?"

"Then you admit that you *did* use atomic weapons!"

"Oh, Bogi!" Head was aching. "Said nothing of sort. Hit anything hard enough, strike sparks. Elementary physics, known to everybody but intelligentsia. We just struck damndest big sparks ever made by human agency, is all. Big flash. Heat, light, ultraviolet. Might even produce X-rays, couldn't say. Gamma radiation I strongly doubt. Alpha and beta, impossible. Was sudden release of mechanical energy. But nuclear? Nonsense!"

Prof said, "Does that answer your questions, Mr. Minister?"

"It simply raises more questions. For example, this bombardment is far beyond anything the Cabinet authorized. You saw the shocked faces when those terrible lights appeared on the screen. Yet the Minister of Defense says that it is even now continuing!"

Glanced at watch. "Another just hit Cheyenne Mountain."

Wright said, "You hear that? You hear? He *boasts* of it. Gospodin President, this carnage must stop!"

I said, "Yammer — Minister, are you suggesting that their space defense HQ is not a military target? Which side are you on? Luna's? Or F.N.?"

"Manuel!"

"Tired of this nonsense! Was told to do job, did it. *Get this yammer-head off my back!*"

Was shocked silence, then somebody said quietly, "May I make a suggestion?"

Prof looked around. "If anyone has a suggestion that will quiet this unseemliness, I will be most happy to hear it."

"Apparently we don't have very good information as to what these bombs are doing. It seems to me that we ought to slow up that twenty-minute schedule. Stretch it out, say to one every hour—and skip the next two hours while we get more news. Then we might want to postpone the attack on great China at least twenty-four hours."

Were approving nods from almost everybody and murmurs: "Sensible idea!" — "Da. Let's not rush things."

Prof said, "Manuel?"

I snapped, "Prof, you *know* answer! Don't shove it on me!"

"Perhaps I do, Manuel . . . but I'm tired and confused and can't remember it."

Wyoh said suddenly, "Mannie, explain it. I need it explained, too."

So pulled self together. "A simple matter of law of gravitation. Would have to use computer to give exact answer but next half dozen shots are fully committed. Most we can do is push them off target—and maybe hit some town we haven't warned. *Can't* dump them into an ocean, is too late; Cheyenne Mountain is fourteen hundred kilometers inland. As for stretching schedule to once an hour, that's silly. Aren't tube capsules you start and stop; these are *falling rocks*. Going to hit *somewhere every twenty minutes*.

You can hit Cheyenne Mountain which hasn't anything alive left on it by now—or can hit somewhere else and kill people. Idea of delaying strike on Great China by twenty-four hours is just as silly. Can abort missiles for Great China for a while yet. But *can't* slow them up. If you abort, you waste them. And anybody who thinks we have steel casings to waste better go look."

Prof wiped brow. "I think all questions have been answered, at least to my satisfaction."

"Not to mine, sir!"

"Sit down, Gospodin Wright. You force me to remind you that your ministry is *not* part of the War Cabinet. If there are no more questions—I hope there are none—I will adjourn this meeting. We all need rest. So let us—"

"Prof!"

"Yes, Manuel?"

"You never let me finish reporting. Late tomorrow or early Sunday we catch it."

"How, Manuel?"

"Bombing. Invasion possible. Two cruisers headed this way."

That got attention. Presently Prof said tiredly, "The Government Cabinet is adjourned. The War Cabinet will remain."

"Just a second," I said. "Prof, when we took office, you got undated resignations from us."

"True. I hope not to have to use any of them, however."

"You're about to use one."

"Manuel, is that a threat?"

"Call it what you like." I pointed at Wright. "Either that yammerhead goes . . . or I go."

"Manuel, you need sleep."

Was blinking back tears. "Certainly do! And going to get some. Right *now*! Going to find a doss here at Complex and get some. About ten hours. After that, if *am* still Minister of Defense, you *can* wake me. Otherwise let me sleep."

By now everybody was looking shocked. Wyoh came up and stood by me. Didn't speak, just slipped hand into my arm.

Prof said firmly, "All please leave save the War Cabinet and Gospodin Wright." He waited while most filed out. Then said, "Manuel, I can't accept your resignation. Nor can I let you chivvy me into hasty action concerning Gospodin Wright, not when we are tired and overwrought. It would be better if you two were to exchange apologies, each realizing that the other has been overstrained."

"Uh—" I turned to Finn. "Has he been fighting?" I indicated Wright.

"**H**uh? Hell, no. At least he's not in my outfits. How about it, Wright? Did you fight when they invaded us?"

Wright said stiffly, "I had no opportunity. By the time I knew of it, it was over. But now both my bravery and my loyalty have been impugned. I shall insist —"

"Oh, shut up," I said. "If duel is what you want, can have it first moment I'm not busy. Prof, since he doesn't have strain of fighting as excuse for behavior, I won't apologize to a yammerhead for being a yammerhead. And you don't seem

to understand issue. You let this yammerhead climb on my back — and didn't even *try* to stop him! So either fire him, right now, or fire *me*."

Finn said suddenly, "I match that, Prof. Either fire this louse — or fire us both." He looked at Wright. "About that duel, choom—you're going to fight *me* first. You've got two arms. Mannie *hasn't*."

"Don't need two arms for *him*. But thanks, Finn."

Wyoh was crying — could feel it though couldn't hear it. Prof said to her most sadly, "Wyoming?"

"I'm s-s-soory, Prof! Me, too."

Only "Clayton" Watenabe, Judge Brody, Wolfgang, Stu and Sheenie were left, handful who counted — War Cabinet. Prof looked at them; I could see they were with me, though it cost Wolfgang an effort; he worked with Prof, not with me.

Prof looked back at me and said softly, "Manuel, it works both ways. What you are doing is forcing me to resign." He looked around. "Good night, comrades. Or rather, 'Good morning.' I'm going to get some badly needed rest." He walked briskly out without looking back at me.

Wright was gone; I didn't see him leave. Finn said, "What about these cruisers, Mannie?"

I took deep breath. "Nothing earlier than Saturday afternoon. But you ought to evacuate Tycho Under. Can't talk now. Groggy."

Agreed to meet him there at twenty-one hundred, then let Wyoh lead me away. Think she put me to bed but don't remember.

Prof was there when I met Finn in Warden's office shortly before twenty-one hundred Friday. Had had nine hours sleep, bath, breakfast Wyoh had fetched from somewhere and a talk with Mike. Everything going to revised plan. Ships had not changed ballistic. Great China strike about to happen.

Got to office in time to see strike by video. All okay and effectively over by twenty-one-oh-one and Prof got down to business. Nothing said about Wright, or about resigning. Never saw Wright again.

I mean I *never* saw him again. Nor ask about him. Prof didn't mention row, so I didn't.

We went over news and tactical situation. Wright had been correct in saying that "thousands of lives" had been lost; news up from Earthside was full of it. How many we'll never know; if a person stands at ground zero and tonnes of rock land on him, isn't much left. Those they could count were ones farther away, killed by blast. Call it fifty thousand in North America.

Never will understand people! We spent three days warning them. And you couldn't say they hadn't heard warnings; that was why they were there. To see show. To laugh at our nonsense. To get "souvenirs." Whole families went to targets, some with picnic baskets. *Picnic baskets!* Boje-moi!

And now those alive were yelling for our blood for this "Senseless slaughter." Da. Hadn't been any indignation over their invasion and

(nuclear!) bombing of us four days earlier — but oh were they sore over our "premeditated murders." *Great New York Times* demanded that entire Lunar "rebel" government be fetched Earthside and publicly executed — "this is clearly a case in which the humane rule against capital punishment must be waived in the greater interests of all mankind."

Tried not to think about it, just as had been forced not to think too much about Ludmilla. Little Milla hadn't carried a picnic lunch. *She* hadn't been a sightseer looking for thrills.

Tycho Under was pressing problem. If those ships bombed warrens — and news from Earthside was demanding exactly that — Tycho Under could not take it. Roof was thin. H-bomb would decompress all levels; airlocks aren't built for H-bomb blasts.

(Still don't understand people. Terra was supposed to have an absolute ban against using H-bombs on people; that was what F.N. was all about. Yet were loud yells for F.N. to H-bomb *us*. They quit claiming that our bombs were nuclear, but all North America seemed frothingly anxious to have *us* nuke-bombed.)

Don't understand Loonies for that matter. Finn had sent word through his militia that Tycho Under must be evacuated. Prof had repeated it over video. Nor was it problem; Tycho Under was small enough that Novylen and L-City could doss and dine them. We could divert enough capsules to move them all in twenty hours — dump them into Novylen

an encourage half of them to go on to L-City. Big job but no problems. Oh, minor problems—start compressing city's air while evacuating people, so as to save it; decompress fully at end to minimize damage; move as much food as was time for; cofferdam accesses to lower farm tunnels; so forth. All things we knew how to do and with stilyagi and militia and municipal maintenance people had organization to do.

Had they started evacuating? Hear that hollow echo!

Were capsules lined up nose to tail at Tycho Under and no room to send more till some left. And weren't moving. "Mannie," said Finn, "don't think they are going to evacuate."

"**D**amn it," I said, "they've *got* to. When we spot a missile headed for Tycho Under will be too late. You'll have people trampling people and trying to crowd into capsules that won't hold them. Finn, your boys have got to make them."

Prof shook his head. "No, Manuel."

I said angrily, "Prof, you carry this 'no coercion' idea too far! You know they'll riot."

"Then they will riot. But we will continue with persuasion, not force. Let us now review plans."

Plans weren't much but were best we could do. Warn everybody about expected bombings and/or invasion. Rotate guards from Finn's militia above each warren starting when and if cruisers passed around Luna into blind space, Farside—not caught flat-footed again. Maximum pressure and p-suit precautions, all

warrens. All military and semi-military to go on blue alert sixteen hundred Saturday, red alert if missiles launched or ships maneuvered. Brody's gunners encouraged to go into town and get drunk or whatever, returning by fifteen hundred Saturday—Prof's idea. Finn wanted to keep half of them on duty. Prof said No, they would be in better shape for a long vigil if they relaxed and enjoyed 'selves first. I agreed with Prof.

As for bombing Terra, we made no changes in first rotation. Were getting anguished responses from India, no news from Great China. Yet India had little to moan about. Had not used a grid on her, too heavily populated. Aside from picked spots in Thar Desert and some peaks, targets were coastal waters off seaports.

But should have **picked** higher mountains or given **less** warning. Seemed from news that some holy chose to climb each target peak and man followed by endless pilgrims hold off our retaliation by sheer spiritual strength.

So we were murderers again.

Besides that, our water shots killed millions of fish and many fishermen, as fishermen and other seafarers had not heeded warnings. Indian government seemed as furious over fish as over fishermen. But principle of sacredness of all life did not apply to us; they wanted our heads.

Africa and Europe responded more sensibly but differently. Life has never been sacred in Africa and those who went sightseeing on tar-

gets got little bleeding-heart treatment. Europe had a day to learn that we could hit where we promised and that our bombs were deadly. People killed, yes, especially bull-headed sea captains. But not killed in empty-headed swarms as in India and North America. Casualties were even lighter in Brazil and other parts of South America.

Then was North America's turn again—0950.28 Saturday 17 Oct '76.

Mike timed it for exactly 1000 our time which, allowing for one day's progress of Luna in orbit and for rotation of Terra, caused North America to face toward us at 0500 their east coast time and 0200 their west coast time.

But argument as to what to do with this targeting had started early Saturday morning. Prof had not called meeting of War Cabinet but they showed up anyhow, except "Clayton" Watenabe who had gone back to Kongville to take charge of defenses. Prof, self, Finn, Wyoh, Judge Brody, Wolfgang, Stu, Terence Sheehan—which made eight different opinions. Prof is right. More than three people can't decide anything.

Six opinions, should say, for Wyoh kept pretty mouth shut, and so did Prof; he moderated. But others were noisy enough for eighteen. Stu didn't care what we hit—provided New York Stock Exchange opened on Monday morning. "We sold short in nineteen different directions on Thursday. If this nation is not to be bankrupt before it's out of its

cradle, my buy orders covering those shorts had better be executed. Tell them Wolf; make them understand."

Brody wanted to use catapult to smack any more ships leaving parking orbit. Judge knew nothing about ballistics—simply understood that his drillmen were in exposed positions. I didn't argue as most remaining loads were already in slow orbits and rest would be soon—and didn't think we would have old catapult much longer.

Sheenie thought it would be smart to repeat that grid while placing one load exactly on main building of North American Directorate. "I know Americans, I was one before they shipped me. They're sorry as hell they ever turned things over to F.N. Knock off those bureaucrats and they'll come over to our side."

Wolfgang Korsakov, to Stu's disgust, thought that their speculations might do better if all stock exchanges were closed till it was over.

Finn wanted to go for broke—warn them to get those ships out of our sky, then hit them for real if they didn't. "Sheenie is wrong about Americans; I know them, too. N.A. is toughest part of F.N.; they're the ones to lick. They're already calling us murderers, so now we've got to hit them, *hard*! Hit American cities and we can call off the rest.

I slid out, talked with Mike, made notes. Went back in; they were still arguing. Prof looked up as I sat down. "Field Marshal, you have not expressed your opinion."

I said, "Prof, can't we lay off that 'field marshal' nonsense? Chil-

dren are in bed, can afford to be honest."

"As you wish, Manuel."

"Been waiting to see if any agreement would be reached."

Was none. "Don't see why I should have opinion," I went on. "Am just errand boy, here because I know how to program ballistic computer." Said this looking straight at Wolfgang—a number-one comrade but a dirty-word intellectual I'm just a mechanic whose grammar isn't much while Wolf graduated from a fancy school, Oxford, before they convicted him. He deferred to Prof but rarely to anybody else. Stu, da. But Stu had fancy credentials, too.

Wolf stirred uneasily and said, "Oh, come, Mannie, of course we want your opinions."

"Don't have any. Bombing plan was worked out carefully; everybody had chance to criticize. Haven't seen anything to justify changing it."

Prof said, "Manuel, will you review the second bombardment of North America for the benefit of all of us?"

"Okay. Purpose of second smearing is to force them to use up interceptor rockets. Every shot is aimed at a big cities—at null targets, I mean, close to big cities. Which we tell them, shortly before we hit them. How soon, Sheenie?"

"We're telling them now. But we can change it. And should."

"As may be. Propaganda isn't my pidgin. In most cases, to aim close enough to force them to intercept

we have to use water targets. Rough enough. Besides killing fish and anybody who won't stay off water, it causes tremjous local storms and shore damage."

Glanced at watch, saw I would have to stall. "Seattle gets one in Puget Sound right in her lap. San Francisco is going to lose two bridges she's fond of. Los Angeles gets one between Long Beach and Catalina and another a few kilometers up coast. Mexico City is inland so we put one on Popocatepetl where they can see it. Salt Lake City gets one in her lake. Denver we ignore; they can see what's happening in Colorado Springs—for we smack Cheyenne Mountain again and keep it up, just as soon as we have it in line-of-sight. Saint Louis and Kansas City get shots in their rivers and so does New Orleans—probably flood New Orleans. All Great Lake Cities get it, a long list. Shall I read it?"

"Later perhaps," said Prof. "Go ahead."

"Boston gets one in her harbor, New York gets one in Long Island Sound and another midway between her two biggest bridges. Think it will ruin those bridges but we promise to miss them and will. Going down their east coast, we give treatment to two Delaware Bay Cities, then two on Chesapeake Bay, one being of max historical and sentimental importance. Farther south we catch three more big cities with sea shots. Going inland we smack Cincinnati, Birmingham, Chattanooga, Oklahoma City, all with river shots or nearby mountains. Oh, yes,

Dallas. We destroy Dallas spaceport and should catch some ships, were six there last time I checked. Won't kill any people unless they insist on standing on target. Dallas is perfect place to bomb, that spaceport is big and flat and empty, yet maybe ten million people will see us hit it."

"If you hit it," said Sheenie.

"When, not 'if.' Each shot is backed up by one an hour later. If neither one gets through, we have shots farther back which can be diverted. For example, easy to shift targets among Delaware-Bay-Chesapeake-Bay group. Same for Great Lakes group. But Dallas has its own string of backups and a long one—we expect it to be heavily defended. Backups run about six hours, as long as we can see North America—and last backups can be placed anywhere on continent . . . since farther out a load is when we divert it, farther we can shift it."

"I don't follow that," said Brody.

"A matter of vectors, Judge. A guidance rocket can give a load so many meters per second of side vector. Longer that vector has to work, farther from original point of aim load will land. If we signal a guidance rocket three hours before impact, we displace impact three times as much as if we waited till one hour before impact. Not quite that simple but our computer can figure it. If you give it time enough."

"How long is 'time enough'?" asked Wolfgang.

I carefully misunderstood. "Computer can solve that sort of

problem instantaneously once you program it. But such decisions are pre-programmed. Something like this: If, out of target group A, B, C, and D, you find that you have failed to hit three targets on first and second salvos, you reposition all group-one second backups so that you will be able to choose those three targets while distributing other second backups of that group for possible use on group two while repositioning third backups—"

"Slow up!" said Wolfgang. "I'm not a computer. I just want to know how long before we have to make up our minds."

"Oh." I studied watch showily. "You now have . . . three minutes fifty-eight seconds in which to abort leading load for Kansas City. Abort program is set up and I have my best assistant—fellow named Mike—standing by. Shall I phone him?"

Sheenie said, "For Heaven's sake, Man—abort!"

"Like hell!" said Finn. "What's matter, Terence? No guts?"

Prof said, "Comrades! Please!"

I said, "Look, I take orders from head of state—Prof over there. If he wants opinions, he'll ask. No use yelling at each other." I looked at watch. "Call it two and a half minutes. More margin, of course, for other targets; Kansas City is farthest from deep water. But some Great Lake cities are already past ocean abort; Lake Superior is best we can do. Salt Lake City maybe an extra minute. Then they pile up." I waited.

"Roll call," said Prof. "To carry out the program. General Nielsen?"

"Da!"
 "Gospazha Davis?"
 Wyoh caught breath. "Da."
 "Judge Brody?"
 "Yes, of course. Necessary."
 "Wolfgang?"
 "Yes."
 "Comte LaJoie?"
 "Da."
 "Gospodin Sheehan?"
 "You're missing a bet. But I'll go along. Unanimous."
 "One moment. Manuel?"
 "Is up to you, Prof; always has been. Voting is silly."
 "I am aware that it is up to me, Gospodin Minister. Carry out bombardment to plan."

XLV

Most targets we managed to hit by second salvo though all were defended except Mexico City. Seemed likely (98.3% by Mike's later calculation) that interceptors were exploding by radar fusing with set distances that incorrectly estimated vulnerability of solid cylinders of rock. Only three rocks were destroyed; others were pushed off course and thereby did more harm than if not fired at.

New York was tough. Dallas turned out to be very tough.

Perhaps difference lay in local control of interception, for it seemed unlikely that command post in Cheyenne Mountain was still effective. Perhaps we had not cracked their hole in the ground (don't know how deep down it was) but I'll bet that neither men nor computers were still tracking.

Dallas blew up or pushed aside first five rocks, so I told Mike to take everything he could from Cheyenne Mountains and award it to Dallas . . . which he was able to do two salvos later; those two targets are less than a thousand kilometers apart.

Dallas's defenses cracked on next salvo; Mike gave their spaceport three more (already committed) then shifted back to Cheyenne Mountain—later ones had never been nudged and were still earmarked "Cheyenne Mountain." He was still giving that battered mountain cosmic love pats when America rolled down and under Terra's eastern edge.

I stayed with Mike all during bombardment, knowing it would be our toughest. As he shut down till time to dust Great China, Mike said thoughtfully, "Man, I don't think we had better hit that mountain again."

"Why not, Mike?"

"It's not there any longer."

"You might divert its backups. When do you have to decide?"

"I put them on Albuquerque and Omaha but had best start now; tomorrow will be busy. Man my best friend, you should leave."

"Bored with me, pal?"

"In the next few hours that first ship may launch missiles. When that happens I want to shift all ballistic control to Little David's Sling—and when I do, you should be at Mare Undarum site."

"What's fretting you, Mike?"

"That boy is accurate, Man. But he's stupid. I want him supervised.



Decisions may have to be made in a hurry and there isn't anyone there who can program him properly. You should be there."

"Okay if you say so, Mike. But if needs a *fast* program, will still have to phone you." Greatest shortcoming of computers isn't computer shortcoming at all but fact that a human takes a long time, maybe hours, to set up a program that a computer solves in milliseconds. One best quality of Mike was that he could program himself. Fast. Just explain problem, let him program. Samewise and equally, he could program "idiot son" enormously faster than human could.

"But, Man, I want you there because you may *not* be able to phone me. The lines may be cut. So I've prepared a group of possible programs for Junior; they may be helpful."

"Okay, print 'em out. And let me talk to Prof."

Mike got Prof; I made sure he was private, then explained what Mike thought I should do. Thought Prof would object—was hoping he would insist I stay through coming bombardment/invasion whatever — those ships. Instead he said, "Manuel, it's essential that you go. I've hesitated to tell you. Did you discuss odds with Mike?"

"Nyet."

"I have continued to do so. To put it bluntly, if Luna City is destroyed and I am dead and the rest of the government is dead—even if all Mike's radar eyes here are blinded and he himself is cut off from the new catapult—all of which may

happen under severe bombardment . . . even if all this happens at once, Mike still gives Luna even chances if Little David's Sling can operate—and *you* are there to operate it."

I said, "Da, Boss. Yassuh, Massuh. You and Mike are stinkers and want to hog fun. Will do."

"Very good, Manuel."

Stayed with Mike another hour while he printed out meter after meter of programs tailored to other computer—work that would have taken me six months even if able to think of all possibilities. Mike had it indexed and cross-referenced—with horrors in it I hardly dare mention. Mean to say, given circumstances and seemed necessary to destroy (say) Paris, this told how. What missiles in what orbits, how to tell Junior to find them and bring to target. Or *anything*.

Was reading this endless document—not programs but descriptions of purpose-of-program that headed each—when Wyoh phoned. "Mannie dear, has Prof told you about going to Mare Undarum?"

"Yes. Was going to call you."

"All right. I'll pack for us and meet you at Station East. When can you be there?"

"Pack for 'us'? You're going?"

"Didn't Prof say?"

"No." Suddenly felt cheerful.

"I felt guilty about it, dear. I *wanted* to go with you . . . but had no excuse. After all, I'm no use around a computer and I *do* have responsibilities here. Or did. But now I've been fired from all my jobs and so have you."

"Huh?"

"You are no longer defense minister; Finn is. Instead you are Deputy Prime Minister—"

"Well!"

"—and Deputy Minister of Defense, too. I'm already Deputy Speaker and Stu had been appointed Deputy Secretary of State for Foreign Affairs. So he goes with us, too."

"I'm confused."

"It's not as sudden as it sounds; Prof and Mike worked it out months ago. Decentralization, dear, the same thing that McIntyre has been working on for the warrens. If there is a disaster at L-City, Luna Free State still has a government. As Prof put it to me, 'Wyoh dear lady, as long as you three and a few congressmen are left alive, all is not lost. You can still negotiate on equal terms and never admit your wounds.'"

So I wound up as a computer mechanic. Stu and Wyoh met me, with luggage (including rest of my arms), and we threaded through endless unpressured tunnels in p-suits, on a small flat-bed rolligon used to haul steel to site. Greg had big rolligon meet us for surface stretch, then met us himself when we went underground again.

So I missed attack on ballistic radars Saturday night.

XLVI

Captain of first ship, FNS *Esperance*, had guts. Late Saturday he changed course headed straight in. Apparently figured we might at-

tempt jingle-jangle with radars, for he seems to have decided to come in close enough to see our radar installations by ship's radar rather than rely on letting his missiles home in on our beams.

Seems to have considered himself, ship, and crew expendable, for he was down to a thousand kilometers before he launched, a spread that went straight for five out of six of Mike's radars, ignoring random jingle-jangle.

Mike, expecting self soon to be blinded, turned Brody's boys loose to burn ship's eyes, held them on it for three seconds before he shifted them to missiles.

Result: one crashed cruiser, two ballistic radars knocked out by H-missiles, three missiles "killed"—and two gun crews killed, one by H-explosion, other by dead missile that landed square on them—plus thirteen gunners with radiation burns above 800-roentgen death level, partly from flash, partly from being on surface too long. And must add: Four members of Lysistrata Corps died with those crews; they elected to p-suit and go up with their men. Other girls had serious radiation exposure but not up to 800-r level.

Second cruiser continued an elliptical orbit around and behind Luna.

Got most of this from Mike after we arrived Little David's Sling early Sunday. He was feeling grouched over loss of two of his eyes and still more grouched over gun crews—I think Mike was developing something like human conscience; he seemed to feel it was his fault that

he had not been able to outfight six targets at once. I pointed out that what he had to fight with was improvised, limited range, not real weapons.

"How about self, Mike? Are you right?"

"In all essentials. I have outlying discontinuities. One live missile chopped my circuits to Novy Lenin-grad, but reports routed through Luna City inform me that local controls tripped in satisfactorily with no loss in city services. I feel frustrated by these discontinuities—but they can be dealt with later."

"Mike, you sound tired."

"Me tired? Ridiculous! Man, you forget what I am. I'm annoyed, that's all."

"When will that second ship be back in sight?"

"In about three hours if he were to hold earlier orbit. But he will not—probability in excess of ninety per cent. I expect him in about an hour."

"A Garrison orbit, huh? Oh!"

"He left my sight at azimuth and course east thirty-two north. Does that suggest anything, Man?"

Tried to visualize. "Suggests they are going to land and try to capture you, Mike. Have you told Finn? I mean, have you told Prof to warn Finn?"

"Professor knows. But that is not the way I analyze it."

"So? Well, suggests I had better shut up and let you work."

Did so. Lenore fetched me breakfast while I inspected Junior—and am shamed to say could not

manage to grieve over losses with both Wyoh and Lenore present. Mum had sent Lenore out "to cook for Greg" after Milla's death—just an excuse; were enough wives at site to provide home-cooking for everybody. Was for Greg's morale and Lenore's, too; Lenore and Milla had been close.

Junior seemed to be right. He was working on South America, one load at a time. I stayed in radar room and watched, at extreme magnification, while he placed one in estuary between Montevideo and Buenos Aires; Mike could not have been more accurate. I then checked his program for North America, found naught to criticize—locked it in and took key. Junior was on his own—unless Mike got clear of other troubles and decided to take back control.

Then sat and tried to listen to news both from Earthside and L-City. Co-ax cable from L-City carried phones, Mike's hookup to his idiot child, radio, and video; site was no longer isolated. But, besides cable from L-City, site had antennas pointed at Terra; any Earthside news Complex could pick up, we could listen to directly. Nor was this silly extra; radio and video from Terra had been only recreation during construction and this was now a standby in case that one cable was broken.

F.N. official satellite relay was claiming that Luna's ballistic radars had been destroyed and that we were now helpless. Wondered what people of Buenos Aires and Montevideo thought about that. Probably

too busy to listen; in some ways water shots were worse than those where we could find open land.

Luna City *Lunatic's* video channel was carrying Sheenie telling Loonies outcome of attack by *Esperance*, repeating news while warning everybody that battle was *not* over, a warship would be back in our sky any moment—be ready for anything, everybody stay in p-suits (Sheenie was wearing his, with helmet open), take maximum pressure precautions, all units stay on red alert, all citizens not otherwise called by duty strongly urged to seek lowest level and stay there till all clear. And so forth.

He went through this several times—then suddenly broke it: "Flash! Enemy cruiser radar-sighted, low and fast. It may dido for Luna City. Flash! Missiles launched, headed for ejection end of—"

Picture and sound chopped off.

Might as well tell now what we at Little David's Sling learned later: Second cruiser, by coming in low and fast, tightest orbit Luna's field permits, was able to start its bombing at ejection end of old catapult, a hundred kilometers from catapult head and Brody's gunners, and knock many rings out in minute it took him to come into sight and range of drill guns, all clustered around radars at catapult head. Guess he felt safe. Wasn't. Brody's boys burned eyes out and ears off. He made one orbit after that and crashed near Torricelli, apparently in attempt to land, for his jets fired just before crash.

But our next news at new site was

from Earthside; that brassy F. N. frequency claimed that our catapult had been destroyed (true) and that Lunar menace was ended (false) and called on all Loonies to take prisoner their false leaders and surrender themselves to mercy of Federated Nations (nonexistent — "mercy," that is).

Listened to it and checked programming again, and went inside dark radar room. If everything went as planned, we were about to lay another egg in Hudson River, then targets in succession for three hours across that continent—"in succession" because junior could not handle simultaneous hits; Mike had planned accordingly.

Hudson River was hit on schedule. Wondered how many New Yorkers were listening to F.N. newscast while looking at spot that gave it lie.

Two hours later F.N. station was saying that Lunar rebels had had missiles in orbit when catapult was destroyed—but that after those few had impacted would be no more. When third bombing of North America was complete I shut down radar. Had not been running steadily; Junior was programmed to sneak looks only as necessary, a few seconds at a time.

I then had nine hours before next bombing of Great China.

But not nine hours for most urgent decision, whether to hit Great China again. Without information. Except from Terra's news channels. Which might be false. Bloody. Without knowing whether or not

warrens had been bombed. Or Prof was dead or alive. Double bloody. Was I now acting prime minister? Needed Prof; "head of state" wasn't my glass a chai. Above all, needed Mike—to calculate facts, estimate uncertainties, project probabilities of this course or that.

My word, didn't even know whether ships were headed toward us and, worse yet, was afraid to look. If turned radar on and used Junior for sky search, any warship he brushed with beams would see him quicker than he saw them; warships were built to spot radar surveillance. So had heard. Hell, was no military man; was computer technician who had bumbled into wrong field.

Somebody buzzed door; I got up and unlocked. Was Wyoh, with coffee. Didn't say a word, just handed it to me and went away.

Sipped it. There it is, boy—they're leaving you alone, waiting for you to pull miracles out of pouch. Didn't feel up to it.

From somewhere, back in my youth, heard Prof say, "Manuel, when faced with a problem you do not understand, do any part of it you do understand, then look at it again." He had been teaching me something he himself did not understand very well—something in maths—but had taught me something far more important, a basic principle.

Knew at once what to do first.

Went over to Junior and had him print out predicted impacts of all loads in orbit—easy, was a pre-program he could run anytime against

real time running. While he was doing it, I looked for certain alternate programs in that long roll Mike had prepared.

Then set up some of those alternate programs—no trouble, simply had to be careful to read them correctly and punch them in without error. Made Junior print back for check before I gave him signal to execute.

When finished—forty minutes—every load in trajectory intended for an inland target had been retargeted for a seacoast city—with hedge to my bet that execution was delayed for rocks farther back. But, unless I canceled, Junior would reposition them as soon as need be.

Now horrible pressure of time was off me, now could abort my load into ocean right up to last few minutes before impact. Now could think. So did.

Then called in my "War Cabinet"—Wyoh, Stu, and Greg my "Commander of Armed Forces," using Greg's office. Lenore was allowed to go in and out, fetching coffee and food, or sitting and saying nothing. Lenore is a sensible fem and knows when to keep quiet.

Stu started it. "Mr. Prime Minister, I do not think that Great China should be hit this time."

"Never mind fancy titles, Stu. Maybe I'm acting, maybe not. But haven't time for formality."

"Very well. May I explain my proposal?"

"Later." I explained what I had done to give us more time; he nodded and kept quiet. "Our tightest

squeeze is that we are out of communication, both Luna City and Earthside. Greg, how about that repair crew?"

"Not back yet."

"If break is near Luna City, they may be gone a long time. If can repair at all. So must assume we'll have to act on our own. Greg, do you have an electronics tech who can jury-rig a radio that will let us talk to Earthside? To their satellites, I mean—that doesn't take much with right antenna. I may be able to help and that computer tech I sent you isn't too clumsy, either." (Quite good, in fact, for ordinary electronics—a poor bloke I had once falsely accused of allowing a fly to get into Mike's guts. I had placed him in this job.)

"Harry Biggs, my power plant boss, can do anything of that sort," Greg said thoughtfully, "if he has the gear."

"Get him on it. You can vandalize anything but radar and computer once we get all loads out of catapult. How many lined up?"

"Twenty-three, and no more steel."

"So twenty-three it is, win or lose. I want them ready for loading; might lob them off today."

"They're ready. We can load as fast as the cat can throw them."

"Good. One more thing—Don't know whether there's an F.N. cruiser—maybe more than one—in our sky or not. And afraid to look. By radar, I mean; radar for skywatch could give away our position. But must have skywatch. Can you get volunteers for eyeball skywatch?"

Lenore spoke up. "I volunteer!"

"Thanks, honey; you're accepted."

"We'll find them," said Greg. "Won't need fems."

"Let her do it, Greg; this is everybody's show." Explained what I wanted: Mare Undarum was now in dark semi-lunar; Sun had set. Invisible boundary between sunlight and Luna's shadow stretched over us, a precise locus. Ships passing through our sky would wink suddenly into view going west, blink out going east. Visible part of orbit would stretch from horizon to some point in sky. If eyeball team could spot both points, mark one by bearing, other by stars, and approximate time by counting seconds, Junior could start guessing orbit—two passes and Junior would know its period and something about shape of orbit. Then I would have some notion of when would be safe to use radar and radio, and catapult—did not want to loose a load with F.N. ship above horizon, could be radar-looking our way.

Perhaps too cautious—but had to assume that this catapult, this one radar, these two dozen missiles, were all that stood between Luna and total defeat—and our bluff hinged on them never knowing what we had or where it was. We had to appear endlessly able to pound Terra with missiles, from source they had not suspected and could never find.

Then as now, most Loonies knew nothing about astronomy—we're cave dwellers, we go up to surface only when necessary. But we were lucky; was amateur astronomer

in Greg's crew, cobbler who had worked at Richardson. I explained, put him in charge, let him worry about teaching eyeball crew how to tell stars apart. I got these things started before we went back to talk-talk. "Well, Stu? Why shouldn't we hit Great China?"

"I'm still expecting word from Dr. Chan. I received one message from him, phoned here shortly before we were cut off from cities—"

"My word, why didn't you tell me?"

"I tried to, but you had yourself locked in and I know better than to bother you when you are busy with ballistics. Here's the translation. Usual LuNoHo Company address with a reference which means it's for me and that it has come through by Paris agent. 'Our Darwin sales representative'—that's Chan—"informs us that your shipments of"—well, never mind the coding; he means the attack days while appearing to refer to last June—"were improperly packaged resulting in unacceptable damage. Unless this can be corrected, negotiations for long-term contract will be seriously jeopardized."

Stu looked up. "All doubletalk. I take it to mean that Dr. Chan feels that he has his government ready to talk terms . . . but that we should let up on bombing Great China or we may upset his apple cart."

"Hmm—" Got up and walked around. Ask Wyoh's opinion? Nobody knew Wyoh's virtues better than I . . . but she oscillated between fierceness and too-human compassion—and I had learned al-

ready that a "head of state," even an acting one, must have neither. Ask Greg? Greg was a good farmer, a better mechanic, a rousing preacher; I loved him dearly—but did not want his opinion. Stu? I had had his opinion.

Or did I? "Stu, what's your opinion? Not Chan's opinion—but your own."

Stu looked thoughtful. "That's difficult, Mannie. I am not Chinese, I have not spent much time in Great China, and can't claim to be expert in their politics nor their psychology. So I'm forced to depend on his opinion."

"Uh—Damn it, he's not a Loonie! His purposes are not our purposes. What does *he* expect to get out of it?"

"I think he is maneuvering for a monopoly over Lunar trade. Perhaps bases here, too. Possibly an extra-territorial enclave. Not that we would grant that."

"Might if we were hurtin'."

"He didn't say any of this. He doesn't say much, you know. He listens."

"Too well I know." Worried at it, more bothered each minute.

News from Earthside had been droning in background; I had asked Wyoh to monitor while I was busy with Greg. "Wyoh hon, anything new from Earthside?"

"No. The same claims. We've been utterly defeated and our surrender is expected momentarily. Oh, there's a warning that some missiles are still in space, falling out of control, but with it a

reassurance that the paths are being analyzed and people will be warned in time to avoid impact areas."

"Anything to suggest that Prof—or anybody in Luna City, or anywhere in Luna—is in touch with Earthside?"

"Nothing at all."

"Damn. Anything from Great China?"

"No. Comments from almost everywhere else. But not from Great China."

"Uh—" Stepped to door. "Greg! Hey, cobber, see if you can find Greg Davis. I need him."

Closed door. "Stu, we're not going to let Great China off."

"So?"

"No. Would be nice if Great China busted alliance against us; might save us some damage. But we've got this far only by appearing able to hit them at will and to destroy any ship they send against us. At least I hope that last one was burned and we've certainly clobbered eight out of nine. We won't get anywhere by looking weak, not while F.N. is claiming that we are not just weak but finished. Instead we must hand them surprises. Starting with Great China and if it makes Dr. Chan unhappy, we'll give him a kerchief to weep into. If we can go on looking strong—when F.N. says we're licked—then eventually some veto power is going to crack. If not Great China, then some other one."

Stu bowed without getting up. "Very well, sir."

"I—" Greg came in. "You want me, Mannie?"

"What makes with Earthside sender?"

"Harry says you can have it by tomorrow. A crummy rig, he says, but push watts through it and will be heard."

"Power we got. And if he says 'tomorrow' then he knows what he wants to build. So will be *today*—say six hours. I'll work under him. Wyoh hon, will you get my arms? Want number six and number three—better bring number five, too. And you stick with me' and change arms for me. Stu, want you to write some nasty messages—I'll give you general idea and you put acid in them. Greg, we are *not* going to get all those rocks into space at once. Ones we have in space now will impact in next eighteen, nineteen hours. Then, when F.N. is announcing that all rocks are accounted for and Lunar menace is over . . . we crash into their newscast and warn of next bombings. Shortest possible orbits. Greg, ten hours or less—so check everything on catapult and H-plant and controls; with that extra boost all has to be dead on."

Wyoh was back with arms; I told her "number six" and added, "Greg, let me talk with Harry."

XLVII

Six hours later sender was ready to beam toward Terra. Was ugly job, vandalized mainly out of a resonance prospector used in project's early stages. But could ride an audio signal on its radio frequency and was powerful. Stu's nastified versions of my warnings had been

taped and Harry was ready to zip-squeal them—all Terran satellites could accept high speed at sixty-to-one and had no wish to have our sender heated more seconds than necessary; eyeball watch had confirmed fears: At least two ships were in orbit around Luna.

So we told Great China that her major coastal cities would each receive a Lunar present offset ten kilometers into ocean—Pusan, Tsingtao, Taipei, Shanghai, Saigon, Bangkok, Singapore, Djakarta, Darwin, and so forth—except that Old Hong Kong would get one smack on top of F.N.'s Far East offices, so kindly have all human beings move far back. Stu noted that human beings did not mean F.N. personnel; they were urged to stay at desks.

India was given similar warnings about coastal cities and was told that F.N. global offices would be spared one more rotation out of respect for cultural monuments in Agra—and to permit human beings to evacuate. (I intended to extend this by another rotation as deadline approached out of respect for Prof. And then another, indefinitely. Damn it, they *would* build their home offices next door to most overdecorated tomb ever built. But one that Prof treasured.)

Rest of world was told to keep their seats; game was going extra innings. But stay away from *any* F.N. offices anywhere; we were frothing at mouth and no F.N. office was safe. Better yet, get out of any city containing an F.N. headquarters—but F.N. vips and finks were urged to sit tight.

Then spent next twenty hours coaching junior into sneaking his radar peeks when our sky was clear of ships, or believed to be. Napped when I could and Lenore stayed with me and woke me in time for next coaching. And that ended Mike's rocks and we all went into alert while we got first of Junior's rocks flung high and fast. Waited until certain it had gone hot and true—then told Terra where to look for it and where and when to expect it, so that all would know that F.N.'s claims of victory were on a par with their century of lies about Luna—all in Stu's best, snotty, supercilious phrases delivered in his cultured accents.

First one should have been Great China but was one piece of North American Directorate we could reach with it—her proudest jewel, Hawaii. Junior placed it in triangle formed by Maui, Molokai, and Lanai. I didn't work out programming; Mike had anticipated everything.

Then pronto we got off *ten* more rocks at short intervals (had to skip one program, a ship in our sky) and told Great China where to look and when to expect them and where—coastal cities we had neglected day before.

Was down to twelve rocks but decided was safer to run out of ammunition than to look *as* if we were running out. So I awarded seven to Indian coastal cities, picking new targets—and Stu inquired sweetly if Agra had been evacuated. If not, please tell us *at once*. (But heaved no rock at it.)

Egypt was told to clear shipping out of Suez Canal—bluff; was hoarding last five rocks.

Then waited.

Impact at Lahaina Roads, that target in Hawaii. Looked good at high mag; Mike could be proud of Junior.

And waited.

Thirty-seven minutes before first China Coast impact Great China denounced actions of F.N., recognized us, offered to negotiate—and I sprained a finger punching abort buttons.

Then was punching buttons with sore finger; India stumbled over feet following suit.

Egypt recognized us. Other nations started scrambling for door.

Stu informed Terra that we had suspended—only suspended, not stopped—bombardments. Now get those ships out of our sky at once—NOW!—and we could talk. If they could not get home without refilling tanks, let them land not less than fifty kilometers from any mapped warren, then wait for their surrender to be accepted. But clear our sky NOW!

This ultimatum we delayed a few minutes to let a ship pass beyond horizon; we weren't taking chances—one missile and Luna would have been helpless.

And waited.

Cable crew returned. Had gone almost to Luna City, found break. But thousands of tonnes of loose rock impeded repair, so they had done what they could—gone back to a spot where they could get

through to surface, erected a temporary relay in direction they thought Luna City lay, sent up a dozen rockets at ten-minute intervals, and hoped that somebody would see, understand, aim a relay at it—any communication?

No.

Waited.

Eyeball squad reported that a ship which had been clock faithful for nineteen passes had failed to show. Ten minutes later they reported that another ship had missed 'expected appearance.

We waited and listened.

Great China, speaking on behalf of all veto powers, accepted armistice and stated that our sky was now clear. Lenore burst into tears and kissed everybody she could reach.

After we steadied down (a man can't think when women are grabbing him, especially when five of them are not his wives)—a few minutes later, when we were coherent, I said, "Stu, want you to leave for Luna City at once. Pick your party. No women—you'll have to walk surface last kilometers. Find out what's going on—but first get them to aim a relay at ours and phone me."

"Very good, sir."

We were getting him outfitted for a tough journey—extra air bottles, emergency shelter, so forth—when Earthside called *me* . . . on frequency we were listening to because message was (learned later) on all frequencies up from Earthside:

"Private message. Prof to Mannie—identification, birthday Bastille

and Sherlock's sibling. Come home at once. Your carriage waits at your new relay. Private message, Prof to—"

And went on repeating.

"Harry!"

"Da, Boss?"

"Message Earthside—tape and squeal; we still don't want them ringing us. *"Private message, Man-nie to Prof. Brass Cannon. On my way!"* Ask them to acknowledge—but use only *one* squeal."

XLVIII

Stu and Greg drove on way back, while Wyoh and Lenore and I huddled on open flatbed, strapped to keep from falling off; was too small. Had time to think; neither girl had suit radio and we could talk only by helmet touch—awkward.

Began to see—now that we had won—parts of Prof's plan that had never been clear to me. Inviting attack against catapult had spared warrens—hoped it had; that was plan—but Prof had always been cheerfully indifferent to damage to catapult. Sure, had a second one—but far away and difficult to reach. Would take *years* to put a tube system to new catapult, high mountains all way. Probably cheaper to repair old one. If possible.

Either way, no grain shipped to Terra in meantime.

And *that* was just what Prof wanted! Yet never once had he hinted that his plan was based on destroying old catapult—his long-range plan, not just Revolution. He might not admit it now. But Mike would

tell me—if put to him flatly: Was or was not this one factor in odds? Food riot predictions and all that, Mike? He would tell me.

That tonne-for-tonne deal—Prof had expounded it Earthside—had been argument for a Terran catapult. But privately he had no enthusiasm for it. Once he had told me, in North America, "Yes, Manuel, I feel sure it would work. But, if built, it will be temporary. There was a time, two centuries ago, when dirty laundry used to be shipped from California to Hawaii—by sailing ship, mind you—and clean laundry returned. Special circumstances. If we ever see water and manure shipped to Luna and grain shipped back, it will be just as temporary. Luna's future lies in her unique position at the top of a gravity well over a rich planet, and in her cheap power and plentiful real estate. If we Loonies have sense enough in the centuries ahead to remain a free port and to stay out of entangling alliances, we will become the crossroads for two planets, three planets, the entire Solar System. We won't be farmers forever."

They met us at Station East and hardly gave time to get p-suits off—was return from Earthside over again, screaming mobs and being ridden on shoulders. Even girls, for Slim Lemke said to Lenore, "May we carry you, too?"—and Wyoh answered, "Sure, why not?"

Most men were pressure-suited and I was surprised to see how many carried guns—until I saw that they were not *our* guns; they were captured. But most of all what blessed relief to see L-City unhurt!

Could have done without triumphal procession; was itching to get to phone and find out from Mike what had happened—how much damage, how many killed, what this victory cost. But no chance. We were carried to Old Dome willy-nilly.

They shoved us up on a platform with Prof and rest of Cabinet and vips and such, and our girls slobbered on Prof and he embraced me Latin style, kiss cheek, and somebody stuck a Liberty Cap on me. Spotted little Hazel in crowd and threw her a kiss.

At last they quieted enough for Prof to speak.

"My friends," he said, and waited for silence. "My friends," he repeated softly. "Beloved comrades. We meet at last in freedom and now have with us the heroes who fought the last battle for Luna, alone." They cheered us, again he waited. Could see he was tired; hands trembled as he steadied self against pulpit. "I want them to speak to you, we want to hear about it, all of us.

"But first I have a happy message. Great China has just announced that she is building in the Himalayas an enormous catapult, to make shipping to Luna as easy and cheap as it has been to ship from Luna to Terra."

He stopped for cheers, then went on, "But that lies in the future. Today—Oh, happy day! At last the world acknowledges Luna's sovereignty. Free! You have won your freedom—"

Prof stopped—looked surprised.

Not afraid, but puzzled. Swayed slightly.

Then he did die.

XLIX

We got him into a shop behind platform. But even with help of a dozen doctors was no use; old heart was gone, strained too many times. They carried him out back way and I started to follow.

Stu touched my arm. "Mr. Prime Minister—"

I said, "Huh? Oh, for Bog's sake!"

"Mr. Prime Minister," he repeated firmly, "you must speak to the crowd, send them home. Then there are things that *must* be done." He spoke calmly but tears poured down cheeks.

So I got back on platform and confirmed what they had guessed and told them to go home. And wound up in room L of Raffles, where all had started—emergency Cabinet meeting. But first ducked to phone, lowered hood, punched MY-CROFTXXX.

Got null-number signal. Tried again—same. Pushed up hood and said to man nearest me, Wolfgang, "Aren't phones working?"

"Depends," he said. "That bombing yesterday shook things up. If you want an out-of-town number, better call the phone office."

Could see self asking office to get me a null. "What bombing?"

"Haven't you heard? It was concentrated on the Complex. But Brody's boys got the ship. No real damage. Nothing that can't be fixed."

Had to drop it; they were waiting. I didn't know what to do but Stu and Korsakov did. Sheenie was told to write news releases for Terra and rest of Luna; I found self announcing a lunar of mourning, twenty-four hours of quiet, no unnecessary business, giving orders for body to lie in state—all words put into mouth, I was numb, brain would not work. Okay, convene Congress at end of twenty-four hours. In Novylen? Okay.

Sheenie has despatches from Earthside. Wolfgang wrote for me something which said that, because of death of our President, answers would be delayed at least twenty-four hours.

At last was able to get away, with Wyoh. A stilyagi guard kept people away from us to easement lock thirteen. Once home I ducked into workshop on pretence of needing to change arms. "Mike?"

No answer.

So tried punching his combo into house phone—null signal. Resolved to go out to Complex next day—with Prof gone, needed Mike worse than ever.

But next day was not able to go; trans-Crisium tube was out—that last bombing. You could go around through Torricelli and Novylen and eventually reach Hong Kong. But Complex, almost next door, could be reached only by rolligon. Couldn't take time; I was "government."

Managed to shuck that off two days later. By resolution was decided that Speaker (Finn) had succeeded to Presidency, after Finn and I had

decided that Wolfgang was best choice for Prime Minister. We put it through and I went back to being congressman who didn't attend sessions.

By then most phones were working and Complex could be called. Punched MYCROFTXXX. No answer—So went out by rolligon. Had to go down and walk tube last kilometer but Complex Under didn't seem hurt.

Nor did Mike appear to be.

But when I spoke to him, he didn't answer.

He has never answered. Has been many years now.

You can type questions into him—in Loglan—and you'll get Loglan answers out. He works just fine . . . as a computer. But won't talk. Or can't.

Wyoh tried to coax him. Then she stopped. Eventually I stopped.

Don't know how it happened. Many outlying pieces of him got chopped off in last bombing—was meant, I'm sure, to kill our ballistic computer. Did he fall below that "critical number" it takes to sustain self-awareness? (If is such; was never more than hypothesis.) Or did decentralizing that was done before that last bombing "kill" him?

I don't know. If was just a matter of critical number, well, he's long been repaired; he *must* be back up to it. Why doesn't he wake up?

Can a machine be so frightened and hurt that it will go into catatonia and refuse to respond? While ego crouches inside, aware but never willing to risk it? No, *can't* be that; Mike was unafraid.

Years, changes — Mimi long ago opted out of family management; Anna is "Mum" now and Mimi dreams by video. Slim got Hazel to change name to Stone, two kids and she studied engineering. All those new free-fall drugs and now-days earthworms stay three or four years and go home unchanged. And those other drugs that do almost as much for us; some kids go Earthside to school now. And Tibet catapult — took seventeen years instead of ten; Kilimanjaro job was finished sooner.

One mild surprise—when time came, Lenore named Stu for opting, rather than Wyoh. Made no difference, we all voted "Da!" One thing not a surprise because Wyoh and I pushed it through during time we still amounted to something in government: A brass cannon on a pedestal in middle of Old Dome and over it a flag fluttering in blower breeze—black field speckled with stars, bar sinister in blood, a proud and jaunty brass cannon embroidered over all, and below it our motto: "Tanstaafl!" That's where we hold our Fourth-of-July celebrations.

You get only what you pay for — Prof knew and paid, gaily.

But Prof underrated yammer-heads. They never adopted *any* of his ideas. Seems to be a deep instinct in human beings for making everything compulsory that isn't forbidden. Prof got fascinated by possibilities for shaping future that lay

in a big, smart computer — and lost track of things closer home. Oh, I backed him! But now I wonder. Are food riots too high a price to pay to let people be? I don't know.

Don't know *any* answers, come right down to it.

Wish I could ask Mike.

I wake up in night and think I've heard him — just a whisper: "*Man . . . Man my best friend*—" But when I say, "Mike?" he doesn't answer. Is he wandering around somewhere, looking for hardware to hook onto? Or is he buried down in Complex Under, trying to find way out? Those special memories are all in there somewhere, waiting to be stirred. But *I* can't retrieve them; they were voice-coded.

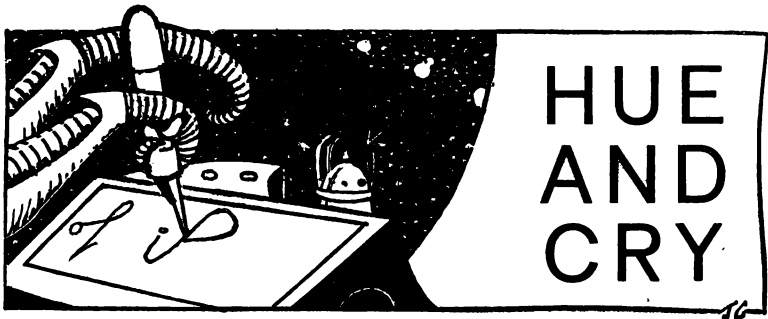
Oh, he's dead as Prof, I know it. (But how dead is Prof?) If I punched it just once more and said, "Hi, Mike!" would he answer, "Hi, Man! Heard any good ones lately?" Been a long time since I've risked it. But he can't really be dead; nothing was hurt — he's just *lost*.

You listening, Bog? Is a computer one of Your creatures?

Too many changes—May go to that talk-talk tonight and toss in some random numbers.

Or not. Since Boom started quite a few young cobbers have gone out to Asteroids. Hear about some nice places out there, not too crowded.

My word, I'm not even a hundred yet. END



Dear Editor:

I have just finished reading the letter by D. Bruce Berry in "Hue and Cry" of the October issue of *If*. I have been reading science fiction for many years and was not too surprised to find out that I am not (by Mr. Berry's description) a normal-general-public-type reader. I always read first the editorial then letters-to-the-editor before going on the body of the magazine, although I have never written such a letter, myself, before. For your information, I like a digest-size magazine and hope you don't change it. It fits easily into coat pocket, purse or glove compartment; I can take it anywhere, everywhere and always be sure of good reading on hand. Also, it can easily be held in one hand; I like to read while eating. As for the covers: I am attracted by art. If the colors and form are artistically beautiful, I am attracted whether the subject matter is monsters, scenery or geometric form. Please don't shorten the editorials, I do enjoy them.—Irene Migneault, 4110 Alabama Street, San Diego, California 92104.

* * *

Dear Editor:

A good example of physical

sciences finally catching up with science fiction is shown in the English science journal *Nature*, Vol. 206, No. 4987, pp. 861-865, May 29, 1965.

The title of this paper is *Possible Anti-Matter Content of the Tunguska Meteor of 1908* by Prof. C. Cowan, C.R. Atlurl and Prof. W.F. Libby—a Nobel Prize winner.

This "meteor"—sic—has been attributed to:

1. A meteor,
2. A small comet,
3. A nuclear explosion of some sort!, and now to anti-matter annihilation.

The first three of these are ruled out for various reasons and the anti-matter model seems to fit the observed perimeters for the explosion, although anti-matter has never been observed on earth.

I am sure that anti-matter or its equivalent has been used as a bomb or some thing in past—very past—science fiction stories. No one seems to be laughing at this idea or suggesting the authors see a "head shrinker" or WORSE! It gives one something to ponder, doesn't it?—Peter R. Taylor, 304 Atherton Hall, Penn State University, University Park, Pennsylvania.

Dear Editor:

Concerning a letter from Linda Leach in your Jan. '66 issue: The story she is interested in is *The Arena* by Fredric Brown, first printed in Astounding June 1944, also reprinted in a Groff Conklin anthology: *The Big Book of S.F.* published by Crown. In this short piece Mr. Brown commands the readers' participation with his use of excellent sensory illusions, somewhat like setting a Morrow cover to words. Many other writers make good use of this technique, among which Philip Jose Farmer is a prime example. I especially enjoyed his *Day of The Great Shout*.

If *Galaxy* pubs. will continue to print fiction of that quality, there will never be need to worry about readership following. Only in this way will S.F. insure its rightful place in literature, although I expect the snubbing by the "Ivory Tower" contemporary critics will continue forever.

But why single out S.F. for such unwarranted criticism? Because it generally smacks of fantasy? Steinbeck, Ustinov, Poe—even Shakespeare and countless others wrote fantasies at one time or another. They were of the supernatural instead of the science variety, but, as they say, it's the same difference. Well then, maybe S.F. is too specialized or too "far out"? Hardly a basis for criticism. For instance: Murder, mysteries and detective fiction are surely highly specialized and nothing could be farther out than the recent rash of "super-spy" stories. Yet I haven't heard the critics taking pot-shots at these fields.

I'm sure that you, Mr. Pohl, and your contemporaries bat these, and many other arguments around with

the literary magnates. And I'm equally sure that they just smile condescendingly and decide to ignore nuts like you. Now isn't it true that S.F. is just hokey stuff like Buck Rogers and horrible monsters? (Critics must be rabid fans of the comics and low budget motion pictures.) That is what they think but we knew better, don't we?

Incidentally, I have one final question: What ever happened to Walter M. Miller Jr?— L.E. Donahue, 6811 Jeff Davis Pike, Apt. 51, Richmond 34, Va. 23234.

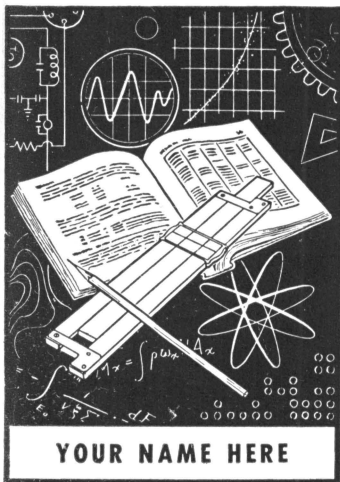
● Re Walter Miller, we don't know—but if anyone does, we'd like to hear. Re critics taking pot-shots at science fiction, this seems to be the nature of the beast. Not all critics; and not really at science fiction (because they happily love science-fiction stories that aren't labeled science fiction, like *The Child Buyer* and 1984.) What they oppose, it seems, is their own construct of what "science fiction" is like, presumably because they once saw *The Beast from 20,000 Fathoms*, didn't like it, and assume sf has nothing else to offer. Well, it's their loss, poor wretches!

Meanwhile, looks like that fills us up for another month. Our "first" this month is Garrett Brown. Hope you'll be with us again, for more of *Earthblood* (since the Heinlein serial had to stop sometime, we're delighted we had something like *Earthblood* to follow it up with!) and for the other stories coming up.

By the way, we just bought a new one from James Blish. Tentative title is *To Mars by Treehouse*, and it's a good one!

—The Editor

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By Max Shulman

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